REPORT

EXAMINATIONS OF SCHOOLS

NORFOLK COUNTY,

MASSACHUSETTS.

BY

GEORGE A. WALTON,
AGENT OF THE STATE BOARD OF IDUCATION.

BOSTON:

Rand, Aberg, & Co., Printers to the Commonwealth, 117 Franklin Street. 1880.



Compliments of

Sec. A. Walton!



REPORT

OF

EXAMINATIONS OF SCHOOLS

N

NORFOLK COUNTY,

MASSACHUSETTS.

BY

GEORGE A. WALTON,

BOSTON:

Rand, Abery, & Co., Printers to the Commonwealth,

117 Franklin Street.

Ju . 3

LB3052

APPENDIX A. - FORTY-THIRD ANNUAL REPORT OF THE BOARD OF EDUCATION.

COPYRIGHT, 1880, BY RAND, AVERY, & CO.

SEP 21 1907 D. of D.

REPORT.

A committee of the Norfolk County School Committees' Association was appointed at the fall meeting in 1878, for the purpose of examining the children throughout the county that had been four years, and those that had been eight years, in school. I was invited by the Committee to act for them in making the questions, and in conducting the examinations. By direction of the Board of Education I entered upon this work. The Board subsequently requested me to furnish to them in tabular form, as well as to the County Association, the results of the examinations. These results, with the necessary explanations, are herewith submitted.

EXTENT OF THE EXAMINATIONS.

The examinations were to be of children that had been four years and those that had been eight years in school, and were to embrace the three leading studies pursued in the schools,—reading, writing, and arithmetic.

It was at once apparent that there would be difficulty in ascertaining with any degree of accuracy what pupils had been in school four and eight years, and then of separating such, and examining them by themselves; nor was it supposed that such a definite limit in point of time was contemplated by the Association. The presumption was that pupils who had been in school four years would be about nine or ten years old, and would be found in the upper class of the primary schools; and that those who had been in school eight years would be about thirteen or fourteen years old, and would be found in the upper class of the grammar schools. Accordingly it was decided to examine the upper class in each of these two grades of schools, and only in exceptional instances were the questions submitted

to pupils in other grades. These were practically grammar classes; two were classes that had been recently admitted from grammar to high schools, and four or five were classes of the grammar grade in high schools.

The following is the aggregate of classes and pupils examined, with the kind of schools to which they belonged:—

Number of primary	classe	es									154
gramma	r class	ses	•		•	•	•				122
Total .	•		•			•	•	•			276
Number of pupils of	_	_	grade r grade		•		•	•	•		2,866 2,095
Total .								•			4,961
Number of primary	schoo	ls									90
grammaı	scho	ols	•	•	•	•	•	•	•		61
mixed so	hools	•	•	•	•	•	•	•	•	•	61
Total .								• .			212

After the examinations were in progress it was found that there was considerable difference in the ages of pupils belonging to the same class, and in the average age of pupils examined in different towns and in different schools of the same town. Accordingly, without changing the basis of the examination, it was decided, in tabulating the results, to include only those of the lower grade whose ages were from eight and a half to ten and a half years, and only those of the higher grade whose ages were from twelve and a half to fifteen and a half years. By extending the age of the grammar grade to fifteen and a half years, liberal allowance was made for increased absences during the later years of school-attendance. That the major part of the pupils in the upper class of the grammar grade might be included in the tabulation, this extension was necessary in many of the schools. With these limits as to age, it will be seen, by comparing the total number examined with the total number tabulated, that a considerable number of those examined are not included in the tables. The number of pupils of the lower grade, whose rank is reported in full or nearly so in the tables, is 1,650; the number of the upper grade is 1,646; the total number is 3,296.

The report of the oral reading, and in many schools also of

the written exercises, embraces all that were examined; and the results would not differ essentially if, in all the branches, all the pupils examined had been reported in the tables.

It should be stated that on many of the papers the ages of the pupils were omitted; in all such cases it was assumed that they were of the average age of the balance of their class, and hence the results of their work are included in the tables of percentages in all the particulars of the examinations.

Whilst the examinations, as already stated, were limited to reading, writing and arithmetic, in reading, the pupils were tested as to their power to read both to themselves and to others, and especially as to their ability to read at sight; under writing were embraced penmanship, spelling, and composition; a test was applied to the pupils in arithmetic, to ascertain their proficiency in performing arithmetical operations, and their ability to comprehend and solve practical problems. All the results of the examinations were carefully marked upon a scale of one hundred. The aggregates and averages will be found in the tables appended to this report.

If it appears that the schools as a whole rank higher in one branch than in another, the cause may be in the fact, or in the standard of the examiner who applied the tests, and judged of the results. It is not unlikely that some one branch receives more attention, or is better taught, in the schools than another; all that the examiner can claim is, that, in doing the work assigned, he has acted according to his best judgment.

TESTS AND MARKING FOR PUPILS FOUR YEARS IN SCHOOL.

In preparing for the examination, it was assumed that a certain standard in each of the studies should be reached, and questions were submitted calculated to test the pupils with reference to that standard.

READING. — The test in oral reading for pupils of the primary grade was the reading of one of the "Prudy" stories. Three books were placed in the hands of the pupils, and passed in succession from one to another till all had read one or more paragraphs. The reading was of the grade of an ordinary third reader, and was read without previous study.

Marking of Oral Reading.—The oral reading was marked with reference to the mechanical execution and expression; and an average was taken. Under mechanical execution were

included position of body and of book, articulation, pronunciation, fluency, and force; under expression were included rate, pitch, stress, inflection, apparent understanding of the piece, and adaptation of qualities of voice to awaken thoughts and feelings in the mind of the hearer.

Writing. — In testing the pupils of the primary grade in this branch, they were furnished with paper and lead-pencil, and were requested to write from dictation the following three sentences: —

1. Which is the better scholar, John or I? 2. Whose little girl are you? My father's. 3. This is a pleasant February day.

Each pupil was also requested to write a letter under the following conditions:—

He was to suppose himself to be at Lynn, or some other place, on a visit, and from that place he was directed to write to some person at his home; he was to state three things about his visit, and to close by telling his friends that he was coming home the next Wednesday, and that he wanted to have the carriage or sleigh sent to the depot to meet him. He was requested to write the letter in proper form, with date, address, compliments, and signature, these terms being expressed in language he could comprehend.

In schools where the pupils had not been used to letter or composition writing, some hints were given to aid them in thinking of something to write. This may account for some similarities in the thoughts expressed in the letters.

The letter was marked for its substance, for its mechanical execution, and for its forms. The substance was considered first for the thought, afterwards for the expression; the results were then combined, and denoted by one percentage. Under the mechanical execution a percentage was found for the penmanship, spelling, capitals, and punctuation. Under the forms a percentage was found for the date, address, compliments, subscription, and general arrangement of the body of the letter.

PENMANSHIP, SPELLING, CAPITALS, AND PUNCTUATION.—The letter and the sentences previously referred to were given as tests in all the above items; the following words were also written from dictation for spelling:—

- 1. week (seven days). 3. rode (past tense of ride).
- 2. waste (to squander). 4. sail (of a boat).

¹ These forms were slightly varied, the last to suit the month and the weather.

Marking of Penmanship. — The penmanship was marked for its legibility and uniformity and for what it promised in these, and in rapidity. The standard was the greatest excellence attained by some of the best writers in the schools that excelled in penmanship.

Marking for Spelling.—Spelling was marked by a percentage of the errors made in spelling the words, "week," "waste," "rode," and "sail," and by a percentage of the errors made in writing the sentences; there being in the sentences ten chances for errors.

Marking for Capitals and Punctuation. — Violations of the most obvious rules for capitals and punctuation were marked from the sentences; there being seven chances for errors in the use of capitals, and four in the use of punctuation-marks.

Marking of the Letter. — The percentage given for the substance of the letter was about equally divided between the thought and the expression. In making up the percentage for the mechanical execution, twenty-five per cent was allowed for penmanship, twenty-five for correct spelling, thirty for the right use of capitals, and twenty per cent for the punctuation. In making up the percentage for the forms, the percentage was equally divided among the five items, the date, address, compliments, subscription, and arrangement of body, of the letter.

ARITHMETIC. — The following tests were applied in numbers: —

- 1. The pupils were required to write in order upon the paper the answers to the following questions:—
 - I. How many are
 - (1.) Three times seven, or 3 sevens?
 - (2.) Eight times nine, or 8 nines?
 - (3.) Six times seven, or 6 sevens?
 - (4.) Nine times five, or 9 fives?
 - (5.) Seven times eight, or 7 eights?
 - (6.) Seven and eight, or 7 plus eight?
 - (7.) Nine from seventeen, or 17 less 9?
 - (8.) Nines in seventy-two? (or times 9.)
 - (9.) Eights in thirty-five? (or times 8.)
- (10.) Suppose you go to the store with a quarter of a dollar (twenty-five cents) in your pocket, and spend ten cents for a slate, and the rest of the money for oranges at three cents apiece, how many oranges would you buy?
- II. Write in column, and add, the following numbers: 184, 337, 692, 476, 208, 356, 575, 993, and 888.

Marking of Arithmetic. — Two percentages were made in marking the arithmetic, — one for mental arithmetic, on the results in the first ten examples, the other for written arithmetic, on the column addition.

TESTS AND MARKING FOR PUPILS EIGHT YEARS IN SCHOOL.

READING. — The test in oral reading for pupils in the grammar grade was a simple story selected from a Fourth Reader, "How Johnny bought a Sewing-Machine." The piece was read without previous study, three books being used, and passed from one pupil to another.

The test in silent reading was applied by giving each pupil a printed narrative, which he read silently, and then wrote in his own language from memory. He was allowed about six minutes for the silent reading, and about an hour for the writing.

The following is the narrative:—

"Cyrus, the Persian prince, had many masters, who endeavored to teach him every thing that was good; and he was educated with several little boys about his own age. He was a boy of a very good disposition, and a humane temper; but even in his youthful games he showed a strong desire to command, and other boys used to make him their king. One evening, his father asked him what he had done or learned that day. 'Sir,' said Cyrus, 'I was punished to-day for deciding unjustly.' - 'How so?' said his father. 'There were two boys,' said Cyrus, 'one of whom was a great, and the other a little boy. Now, it happened that the little boy had a coat that was much too big for him, but the great boy had one that scarcely reached below his middle, and was too tight for him in every part. The great boy proposed to the little boy to change coats with him; "because then," said he, "we shall be both exactly fitted, for your coat is as much too big for you, as mine is too little for me." The little boy would not consent to the proposal; upon which the great boy took his coat away by force, and gave his own to the little boy in exchange. While they were disputing upon this subject, I chanced to pass by, and they agreed to make me judge of the affair. But I decided that the little boy should keep the little coat, and the great boy the great one, for which judgment my master punished me.' - 'Why so?' said Cyrus's father: 'was not the little coat most proper for the little boy, and the large coat for the great boy? '- 'Yes, sir,' answered Cyrus, 'but my master told me I was not made judge to examine which coat best fitted either of the boys, but to decide whether it was just that the great boy should take away the coat of the little one against his consent; and therefore I decided unjustly, and deserved to be punished."

Marking of Reading. — The oral reading was marked for the mechanical execution and for expression. The marking for silent reading was upon the degree of accuracy which the pupil showed in writing the narrative given above. A hundred per cent was allowed when the story as a whole, and the essential particulars, were accurately told.

WRITING, INCLUDING WRITTEN EXPRESSION, PENMANSHIP, CAPITALS, PUNCTUATION, AND SPELLING.— The writing of the narrative was intended to be an exercise in written composition. When it was placed in the hands of the pupils, they were told to read it so that they could write it in their own language from memory.

When they had read it, they were furnished with ruled letter-paper, and were directed to write out the narrative, using pen and ink; they were told to give a title to the piece if they could think of one, and to do the work as well as they could in all respects. More specific directions were given where it was thought necessary.

In addition to the spelling in the written narrative, the following words were dictated for written spelling:—

1. deluge.

2. decency.

3. denies.

4. colonel.

5. deterring.

6. sugar.

7. Chinese.

8. complete.

9. supersede. 10. changeable.

Marking for the Written Expression, Penmanship, Capitals, Punctuation, and Spelling. — Under "written expression" were embraced the title of the narrative, the omission, misuse, and repetition of words, the grammatical construction, and the style of the language. In marking, a slight deduction was made for the repetition or omission of words; while a serious misuse of words, an error in grammatical construction, or a gross inelegance in the use of language, reduced the percentage more largely. In some of the mixed schools, instead of the

In a few instances the narratives were unfinished from no fault of the pupils: the plan of marking these was to take the longest in the particular school where they were written, fix its marks, and compare the others with that one as a standard.

narrative, letters were written. These were marked as nearly

as possible in accordance with the same plan.

The penmanship was marked from the character of the handwriting in the narrative and with reference to what it promised as well as to what it was.

Capitals and punctuation were embraced in one percentage; in exercises that were finished, twenty per cent being allowed for the proper use of quotation-marks and the complement, eighty per cent, for other marks of punctuation and capitals, while a deduction was made according to a general plan for exercises that were left incomplete.

For spelling, two percentages were marked,—one upon the errors in the written exercise, the other upon the errors made in spelling the ten words, "deluge," "decency," &c.

The former percentage was found by allowing a hundred per cent if the narrative contained ten lines or more, and was free from errors. In narratives of about twenty lines, the usual length, five per cent was taken off from a hundred for each misspelled word; when the narratives were shorter and unfinished, a larger per cent was deducted for each error. Some errors, as the repetition of a misspelling, were considered less grave than others, and were but lightly marked.

ARITHMETIC. — Four examples were given to pupils of this grade, as tests in arithmetic, viz.:—

- I. The addition in column of eleven items, each containing three orders of units. (The time allowed was five minutes.)
- II. A certain number, consisting of four orders of units, was given; the pupils were directed to find, by the shortest process, what would be the result of multiplying this number by 12, and dividing the product by 72.

This was expressed on the board thus: $0000 \times 12 \div 72$.

- III. An example in simple interest was assigned; the principal consisting of dollars (four places), the time from Aug. 20 to Dec. 5 of the same year, the rate eight or nine per cent; the interest being required.
- IV. The pupils were asked to find the cost, at ten dollars per rod, of the fencing required to enclose and separate a number of rectangular lots of land which adjoin on the side, and have their fronts in the same straight line, each lot being two rods wide in front and four rods long on the side.*

^{*} In all the exercises in arithmetic, the pupils used Walton's Tables, by which pupils sitting side by side had different numbers, though practically doing the same example.

The following problem was assigned to pupils in this grade who had not studied interest:—

A certain number of dollars was given (different numbers to different pupils): the pupils were to suppose this sum to be paid for three-eighths of a farm, and to find what should be paid for the rest of the farm at the same rate.

Marking of Arithmetic. — A percentage was found for each of these examples; account was taken of the numerical operation and of the abbreviated and logical process.

HOW THE TESTS WERE APPLIED.

The general plan of the examination was approved by several persons of experience, to whom it was referred before being applied in the schools. Some gentlemen of the committee on the examination were appointed to aid me: These were Rev. J. P. Bixby, chairman of school committee of Norwood; Mr. J. W. Allard, superintendent of schools of Milton; Mr. William G. Nowell, superintendent of schools of Weymouth; and Mr. George I. Aldrich, superintendent of schools of Canton. Mr. Bixby assisted in the schools of fifteen of the twenty-four towns of the county; the other gentlemen in the remaining towns, each in those in his own vicinity. I made the examinations in oral reading, and marked the pupils of both grades in most of the schools; and in most I was present while the examinations were going on in the other exercises. By the aid of these gentlemen, the work of examining was greatly facilitated, the time being abridged one-half in schools having pupils of both grades examined. Where all were so efficient, it is not, perhaps, necessary to make mention of any one; but the service of Mr. Bixby was so great, and rendered at such personal sacrifice, as to be worthy of special recognition.

The school committees or superintendents of schools of the respective towns were present in most instances, and aided in arranging and preparing the children for the examinations. The teachers also assisted in this part of the work, and in various ways helped the examiners.

The examinations were begun in December, and ended in the following May. The time given to each class varied from one hour to one hour and forty minutes in the primary grade, and from one hour and a half to two hours in the grammar grade. Generally the time allowed was ample for the large majority of the class to complete the work.

In some few instances it was necessary to take up the papers before they were finished, and in a few schools the written exercises or the oral reading were omitted altogether. Where the exercises were assigned, in most instances, in the opinion of the examiners, sufficient time was allowed to do the work required. Where this was evidently not the case, in marking the papers for the tabulated results, allowance has been made for the deficiency. These explanations will account for most of the omissions of items in the tables.

The reason for sometimes abridging the work, as mentioned above, was found in the necessity of completing the examinations during the winter and spring terms, in the desirability of completing them in each town as soon as possible after they were entered upon in that town, and of giving about the same amount of time to each school. The occasion also for abridging, in some cases, was the time consumed in some of the towns in reaching the schools, the delays in getting the work before the pupils, owing to a want of quickness of comprehension, or of familiarity with written exercises, and the habit the pupils have of writing quite slowly.

The writing of the letters was omitted in a few schools because the pupils were wholly unused to the exercise of letter or composition writing, — in some, in fact, could neither write, nor make the printing letters. In a few instances, the teachers objected to submitting their schools to some of the tests, and their feelings were regarded.

It was found from the examinations in the first two or three schools, that the pupils required more time than was anticipated when the questions were prepared; accordingly, without changing their general character, two of the questions in arithmetic for the grammar grade were slightly shortened when given in other schools. The questions given in the towns marked C and T, however, were in all essential points the same as were given in the town marked A, which was the first examined. The tests given in the early pages of this report, with the slight exceptions elsewhere named, were uniformly applied in all the other towns. The tests were submitted orally, and, when practicable, written upon the blackboard also: all proper explanations were given, and questions answered, by the examiners.

Some schools had no pupils between the ages of eight and a half and ten and a half years who could do the work prepared

for their respective grades. The questions were sometimes modified to suit the attainments of the children, but the results of the examination do not appear in the tables. On the other hand, there were a few schools where the pupils that did the work were all under the age reported, and their work of course does not appear.

There was nowhere, on the part of the teachers, indifference to the results of the examinations; there was, indeed, solicitude with many while the examinations were in progress, and this was shared in some cases by the school committees. But this feeling, which was quite natural and entirely proper, was generally exercised with good sense and a due regard to the ends to be attained by the examinations. Teachers and committees manifested a desire to make the examinations a fair test of the attainments and ability of the pupils, and such in general it is believed they were. It is a pleasure to be able to testify to the excellent spirit manifested by all towards the examination and the examiners.

THE MARKING, AND TABULATION OF THE RESULTS.

On the completion of the visitations of the schools, there were about four thousand papers to examine and mark. This required the handling of each paper many times, for each was to be marked for at least twelve different results, some of these depending upon several particulars. And the work of aggregating and averaging these would then remain to be done. No time that I could command would be sufficient to bring out the results of the examinations in the current year. Mr. William G. Nowell was accordingly appointed by the committee to assist in this part of the work. To this he devoted considerable time in the summer months, rendering most efficient service in marking the papers in penmanship, arithmetic, and spelling, and in tabulating the results of the primary grade. The report is indebted to Mr. Nowell, also, for several interesting details.

It is proper to state, also, that Mrs. Walton has spent, since the first of June, on an average, six hours a day in marking the papers, in verifying, and in tabulating. This part of the work has required much more time and labor than was anticipated. I regret that it has so long delayed the report; but, with the demands made upon my time by other official duties, it was impossible to present it at an earlier date.

PERSONAL OBSERVATIONS IN THE SCHOOLS.

Besides the tables of percentages, and for the better understanding of these, I desire to give the results of my personal observations.

READING.

The exercise of reading involves two distinct processes,—the forming of the ideas and thoughts in our own minds by looking at the words, and the utterance of the words so as to excite ideas and thoughts in the minds of others.

By this analysis we see, first, that reading is something more than recognizing and pronouncing words: the words are signs, and are to be recognized only as a means of awakening ideas and thoughts. If the pupil does not have these awakened by the words he uses, he does not read at all; nor is the process, so far as reading is concerned, simply useless, it is dangerous, just in proportion to the facility with which the words are called.

In the second place, we see that there are two distinct objects to accomplish in teaching to read. The reader is to learn to associate in his own mind ideas and thoughts with their written or printed signs; he is to learn to utter these words so as to awaken in the minds of others such ideas and thoughts as the words are intended to awaken. There are, then, two kinds of reading,—silent and oral. Which, if either, of these two kinds should the schools make the important end in teaching? This is equivalent to asking, which will be most useful to the pupil, or most used by him?

Oral reading is useful in training the organs of speech to the accurate enunciation of words, in training the vocal organs to the production of the proper tones, and in training the organs of respiration to give the proper force in the utterance of words and in the modulation of the voice; all of which are useful in strengthening the organs themselves, in fitting the pupil to use language, and to speak so that he can be heard. This mechanical part of reading is useful in various ways.

Oral reading, as a means of communicating the thoughts ourselves or others have penned, is not to be lightly esteemed; it merits on this account more skill than is ordinarily bestowed upon reading. For this implies a clear conception of the

thoughts of the author, an appreciation of his feelings, and such a power of expression as perfectly to excite these thoughts and feelings in the mind of the hearer. It implies the ability to give ourselves, mind and body, in service to others. But the little, comparatively, which most persons read for the instruction of others, would not constitute a sufficient ground for giving oral reading the prominence it has in the schools.

If we reflect that the reading which men in general do is done for themselves, we shall see that the pupil is to learn silently to take the sense from the words of the written or printed page. The relation of silent reading to all knowledge acquired by the reading of books is such that the ability to read silently can scarcely be over-estimated.

The above distinction between silent and oral reading is important, as showing the true end of teaching reading; but the fact is, that oral necessitates silent reading, and the effectiveness of the former depends largely upon the quality of the latter. Oral reading is to be taught chiefly as presenting the best occasion for the exercise of the powers of the mind in acquiring, for the sake of giving, the sense of what is written.

In teaching oral reading, then, while the teacher may not lose sight of the fact that the chief end of reading is, to give the pupil facility in obtaining the ideas and thoughts, he will lead him to keep constantly in mind the wants of the hearer. This will give a proper direction to the aim of the pupil, both in preparing for his reading, and in the reading itself. It will tend to direct his attention away from himself, and stimulate him to make his best effort, by placing the right motive within.

This may seem to be setting up an ideal standard: it must be confessed that it is not generally reached; but it is believed to be entirely practicable, even in the lower grade of schools, to teach the pupil to read, prompted solely by the desire to affect the mind of another. This motive cannot be employed too early, or too exclusively. When this desire is the motive, the pupil will feel the necessity of first understanding for himself what he is to read. The necessity, prompted by this motive, must result in giving him facility in reading for himself.

In the examinations, the oral reading was considered a test of the ability of the pupils, both to take and to give the sense of a kind of reading with which they were supposed to be familiar. The results were widely different. On the one hand, there were many pupils in both grades, but particularly in the primary, who called off the words in a droning and monotonous way, or shouted them out one after the other with as little regard to the thought as if they had been the columns of a spelling-book. On the other hand, there were pupils who had formed the habit, while reading, of looking forward to the end of the sentence, that they might comprehend the thought before uttering the words. In some instances pupils asked to be allowed to read their paragraph again, saying they did not understand it before. The causes for these differences are found in the difference in the tact of the teachers, and in the difference in their methods and aims: I am not inclined to admit that they result so largely from the superiority of the children in any town or in a particular part of a town, as in some instances members of the school committees claimed.

In general, oral reading is made the end; and the conception the teacher has of this is frequently limited to the articulation of words, to the loudness or fluency of utterance, to the position of the body, to the holding of the book, in some instances to correct pronunciation, and sometimes to extreme precision in all these, and to a straining after the elements which are the means of expression. The voice is often made simply to repeat the words of the paragraph that falls in the class to "the next," or at most led only to imitate in a servile manner the reading of the teacher; or, if trained in tone, pitch, rate, stress, inflection, and so on, it is not in the use of these to the expression of thought. And, as for any systematic analysis by which the pupil learns to make a careful and independent study of his piece, it is but little practised in the schools, even of the grammar grade.

In the larger number of the primary schools, the teachers seem to regard the expression of thought as not within the province of the young pupil. No greater mistake can be made than this: the little child should read with expression the first time and every time he reads. He uses slides of the voice, and stress, when he has thoughts and feelings of his own to utter, and this long before he goes to school: can he not be taught to use them in expressing the thoughts and feelings of others? He has the means; fix in him the motive by directing his attention to the thought; if he has this, he can hardly fail to express it. The training will at least be an easy and agree-

able task. Where bad habits are confirmed in childhood, it requires the skilled hand of a professor, later on, to make a good reader.

A difference in the quality of the reading results from the method of the early teaching of the child. If the teaching is strictly by the A B C method, in which the child is taught to spell out the words before pronouncing them, and then to pronounce them word after word without reference to the sentence they form, the mind is directed chiefly to the spelling-out and pronunciation of the words, and is thus turned away from the thought and expression. Where the reading is taught by the object and word method, the interest awakened in the child, in the object of knowledge, naturally leads to an interest in the words and in the reading. Instead of something imposed upon the pupil, which blunts the mind to all mental effort except to escape from the drudgery, the process excites the desire to know and to tell, and thus puts within, motives which give facility in acquiring knowledge, and make the mind skilful in associating ideas and thoughts with words, and in using the physical organs as instruments for expression. Norfolk County is not without many excellent examples of the right method and aims in teaching, while examples of tact are common which produce good results in apparent disregard of methods.

Table (A), appended to this report, will show the methods at present in use, and those in use four years ago, in the several towns of the county, in teaching beginners to read. The table shows considerable change in the four years, which indicates an awakened interest in the teaching of reading that may more than counterbalance the effects of bad methods at an earlier period. It was thought that possibly the differences in reading might be shown to result from the different methods of teaching. There are too many modifying circumstances, however, to make the table valuable as evidence upon this point. It is inserted in the report as interesting historically, and as likely to have a bearing upon the future progress in the art of reading in the county.

I found in many of the schools that the pupils were attempting to read in books wholly beyond their comprehension; the Fourth and Fifth Readers were in repeated instances in use by children who could not readily call the words of the simplest lesson in the Third Reader which I gave them.

Of some of the schools in one town, my notes say, "The

children were all reading in books too advanced for them; none of those I attempted to hear read in the Third Reader could call words in the Second. Yet all were in the Third that had not already taken up the Fourth. Nearly all of the school should be kept in a grade of reading not above that of the Third Reader. What is true of these schools is true of the county as a whole: very many of the children are trying to read in books beyond their years."

To counteract this tendency, some of the towns have a plan of furnishing additional works supplementary to the ordinary reader. Several sets of different series of readers, of the first, second, and third grades, are purchased at public expense, and passed around from school to school throughout the town. The superintendent of schools in one of the towns remarked that the primary schools in his charge had read the First, Second, and Third Readers, of all the series that are worth reading. By this means the pupil can be kept upon reading suited to his capacity, and is able thoroughly to master the vocabulary of one grade before attempting a higher.

It is very desirable to secure in the pupil a love for reading while in the schools. This love is fostered by the facility with which the pupil learns, and by what he reads. The acquisition of real knowledge which is incident to a right method of teaching is a stimulus to this love. In those schools which I visited where the teaching was begun by teaching the object, then, with the blackboard or chart, its name, and finally producing a written sentence which expressed the pupil's or teacher's thought of the thing, I found an evident interest in reading, which was in marked contrast with what was seen where the A B C method was in vogue.

With this rational mode of teaching, the vocabulary of the pupil names real ideas to him. The words of the book, of part of it at least, are taught him in this way before the book is placed in his hand; so when at length he has the book, it is a delight, and not a task, to read its simple and pleasing stories.

A good method and aptness in teaching, with suitable supplementary reading, cannot fail to increase this love. There are sufficient facts in Norfolk County to prove this to be the practical result.

With the exception of a single school of considerable size, so far as noticed, the girls of the higher grade are better

readers than the boys. The difference in most is quite marked. I can see no reason in the schools themselves why this should be so: but, if the examiners are not mistaken in their observations; the fact is worthy of the consideration of teachers and committees, as well as of the boys themselves and their parents.

So far as I could discover, with rare exceptions, little attention is given to what the children read, or to reading for the acquisition of knowledge, if we leave out of account the text of books committed to memory for recitation. The time of reading in both grades seems to be mostly occupied in teaching to call the words properly, without reference to the amount or kind of knowledge the pupil is to acquire. As an exception I saw in a few of the schools sentences used as readinglessons for the younger pupils, which were evidently designed to teach some useful knowledge. Some exceptions were noticed also in the grammar grades, where books of history were substituted in part for the reading-books; not, however, in the few cases I saw, with any evident gain either to the exercise of reading or to the knowledge of history.

I see no reason why the earliest lessons taught in the primary schools should not be so arranged and conducted as to teach those elementary facts of plants, and those terms, which will afterwards be used in the study of botany, - that knowledge of animals and minerals which will afterwards be used in zoölogy and mineralogy, those forms and names which will afterwards be used in geometry, and so on; and no reason why the simple facts which underlie the other sciences should not be acquired through the reading-exercises of the intermediate schools. Portions of history can be selected which are suited to oral reading; but, like the selections in the advanced readers, the reading can hardly be worthy the time and attention of the class till it has been the subject of careful study by the reader.

While the pupils should read more than they now do, and read to gain useful knowledge, it would be a mistake to abandon the use of well-cliosen reading-books for study and practice. These are distinguished from the books for general reading by being arranged with reference to training and culture. Before his oral reading the older pupil should study each selection, first to obtain a knowledge of the piece as a whole, then to get the sense of each paragraph, of each clause, and finally to determine what words to emphasize that he may give the sense

to the hearer. This kind of work cannot be done by the primary pupil, and his reading should not require it; but in the upper grade this should be done with every reading-lesson. The lessons of the reading-book furnish the occasions for this study. And this is precisely what is needed to prepare the student to read with profit history or whatever he may read before his class.

By such a plan of study the oral reading becomes a personal effort to express the results of the pupil's own judgment. It brings into requisition a class of books not common at present in the schools, — biographies, gazetteers, encyclopædias, and other books of reference.

The percentages for oral reading for the county are about one-eighth higher than the total average of all the studies. There are two reasons for this: first, the marking is not based upon the ideal standard of the examiner, but upon the ordinary estimate of school reading; and, second, oral reading ordinarily receives a large share of attention during the whole period of the schooling of the child, and really by the common standard shows better results than any other study taught.

The silent reading in the upper grade, as determined by the written narrative, is not marked so high as the oral; the standard was more absolute. The pupils who told the story as a whole, including all the essential particulars, were ranked one hundred per cent in the silent reading; those who failed to get the essential point of the story were marked from forty per cent upwards to sixty-five, according to the accuracy with which their writing was true as to particulars; while those who had misapprehended the story altogether were marked from fifty per cent downwards according to the misstatements they made.

It will be seen by a few specimen copies of the narrative, printed below, that the exercise revealed wide differences in the ability of the pupils to get the sense by silent reading. These differences are not confined to individuals: they characterize whole schools. There are exceptionally good papers found in schools which wrote poorly as a whole; the reverse of this is also true. The following are printed verbatim. Facsimiles of others will be found at the close of the report.

SAMPLES OF NARRATIVES WRITTEN FROM SILENT READING, BY PUPILS IN THE GRAMMAR GRADE.

I.

PUNISHED FOR DECIDING UNJUSTLY.

Cyrus, the Persian prince, had a great many masters, who endeavored to teach him every thing that was good; he was educated with several little boy's about his own age. He was of a good disposition and humane temper, but even in his youthful day's he possesed a strong desire to command, and the boys often made him their king. One night his father said to him "what have you done and learned to day" "Sir," said Cyrus "I was punished for deciding unjustly. "How so" said his father. "There were two boy's one a great and the other a little boy; the little boy had a coat that was much to big for him and the large boy had a coat that was much to small and tight for him in every part. The large boy proposed to exchange coats" 'for said he we shall then be even for my coat which is much to small for me will be right for you.' "But the little boy would not change so the large boy took the little one's coat and gave him his in return; just then I happened to be passing and they said that I should be the judge. I decided that the little boy should keep the little coat and the large boy should keep the great coat, And so I was punished. "How so said his father was not the large coat more suitable for the large boy and the small coat for the little one. "Yes sir" said Cyrus but the teacher said that I was not called upon to judge which was the most suitable but whether it was right for the large boy to take away the little boy's coat without his consent. "So" said Cyrus "I was justly punished."

II.

THE PERSIAN PRINCE.

Cyrus, the Persian Prince, had a great many masters, who tried to teach him goods things; and he was educated with several other boys of his age. He was a very good tempered boy, and had a humane spirit. He had a strong desire to command, and the other boys made him their king.

One day his father asked what he learned or done during the day. "Sir, said Cyrus, "I was punished to day for deciding unjustly." "How so?" asked father. "To-day" said Cyrus, there were two boys, one a great one and the other a small one. It happened that the big boy had a coat that was a great deal too small for him, while the small boy had a coat that was too large for him. The large boy proposed, that the little boy should exchange coats with him. But the little boy did not want to do this, therefore the big boy took it away from him by force. I chanced to be passing by and they called upon me to decide. I gave the little boy the small coat, and the big boy the large coat." "Why were you punished for that?" asked his father, "because the teacher said I was not to be the judge of whose coat it should be, but that whether it was right or not for the big boy to take away the coat from the small boy, therefore I was punished."

III.

JUSTICE AND UNJUSTICE.

Cyrus, the Persian prince had a great many masters who tried to teach him every thing that was right. He had several other boys educated with him. He had a very good disposition but he liked to command. When they used to play his playmates used to have him for their king. One evening his father asked him what he had learned that day. "I was punished for deciding unjustly," he said. "What did you do?" asked his father. "Why," he said, "it happened this way. There were two boys a large boy and a small boy. The small boy had a coat too large for him and the large boy had a coat that was too small for him in every part. Now the large boy wanted the small boy to exchange coats with him. The small boy didn't want to and so the large boy took it away from him. Just then I came along and they wanted me to decide for them. I thought that the small boy ought to keep the coat. The master said that I ought not to decide which coat fitted the best but whether the large boy had a right to take the coat by force. So I had decided unjustly and deserved to be punished."

IV.

ANECDOTE OF CYRUS.

Cyrus, a prince of Persia, had many teachers, and he was educated with other boys of his age. As he liked to take the lead, his companions made him there King. One day his father, asked him, what he had learned that day. Sir, said he, their was two boys, one great, and the other small. the small one, had a coat much to large for him, and the greateone had one to small, then the great one, proposed to change, but the small one, would not consent, and as I chanch to be passing by, they made me judge. I decided in favor of the Great one, thefore my master, puished me. Why so said his father, was not the large coat better for the large boy, and the small coat for the small boy. Sir, my master asked me if it was just, to ttake the coat away without consent, and as I had judged wrong, I deserved to be punished.

v.

QUARREL ABOUT A COAT.

Cyrus, the Persian prince, had good many masters, his father asked him if he had done anything wrong to day, and he said, he had been punished, and his father asked him, what he had been punished for, and he said he had quarraled with another boy.

What about, said his father, and Cyrus said that, a boy he was with, had on a big coat, that just fited him, and his coat was to small for him-self, and this other boy wanted to exchange with him.

But Cyrus would not, just then a man came up, and settled the dispute, saying, that the big boy did very wrong in tareing the coat off the smaller boy. So Cyrus had to be punished for not giving up his coat to the other boy.

VI.

CRYAS THE PERSIAN PRINCE

Cryas was a disobiant boy. The little boy thought that the large Coat

143

would be better for him, and the large boy thought that the small coat would be better for him. But the large coat was as mush to small for the small boy as the large coat was for the large. The large boy had ought to have had the large coat and the small boy the small coat, I think that Cryus was a greedy boy.

VII.

PRINCE OF PERSIA

Cyphus the Prince of Persia he and a another boy went out to walk he had a long coat on which was to big for him the other boy had a coat which was to small for hin and only came down to his middle, and he wanted the little boy to let him take his coat (and the big boy) would let him take his little coat so Cyphus father came and said why wood you not let him take the big coat and he wood take the little coat so he we went home and he become a prince

VIII.

There was a man by the name of Cyrus who was a Persian Prince.

He had a very nice father, and asked him one night what he had done at school that day? He said, "That he had done something unjustly."

The boys, when Cyrus was playing any games with them used to make him their king. One day there was a boy who had a new coat, with Cyrus, and Cyrus wanted to make a change.

The one that the boy had bought was very much to large for him, while Cyrus's was small.

They kept on for two or three days, but would not agree upon it.

While they making this agreement, Cyrus's father came along. Cyrus had a very humane temper and was very gentle.

Because Cyrus would not change with the other in a few days he was punished.

IX.

The boy was whiped because he had the littles boys coat.

X.

Cyrus a pursian prince was a pheasant an educated boy but when he came home that night his father asked him what he had recieved that day. he said that he got punished at school his father asked him what for and he said that there was a great boy and a little boy had a goat and the big boy had a little goat and the little boy had a big goat the big boy wanted to exchane goats he have the big goat and the little boy have the little goat so the big boy took his goat away by force and I came along and they wanted me to be juge and I said that the little boy should have the little goat and the big boy should have the big goat and so that is what I got punished for in school.

XI.

Cyrus the Persean prince he was a boy of sense One evening he was passing by the house a small boy had a big goat the goat was much larger than the boy so that they had a despute over the goat the boys have him for the

judge he gave the little boy the goat when he got home his father asked him if he was good at school he said he had be punished injustly his father siaid that he must be kind to one as to the other.

WRITING.

Under writing, are included penmanship, spelling, and composition.

PENMANSHIP. — The requisites in penmanship are legibility, uniformity, and rapidity. Legibility is first in importance, and is to be first attended to in the teaching. To secure this, we must fix in the mind of the pupil definite forms for all the characters. Besides knowing these forms, the pupil must be taught uniformity as to height, width, slant, angles, and turns, and the proper curve-lines for connecting one letter with another. These elements have reference both to the uniformity and rapidity of the writing, Though rapidity is the lastnamed of the requisites to good penmanship, it is not to be left out of account in the early training. When a few of the simple forms can be executed, the training for rapidity in making these should begin. No little importance attaches to this training. That teaching which does not give the muscles a good degree of facility in executing the forms which the mind conceives, is practically a failure.

The tests which were submitted in the schools were intended to show in the lower grade the results of the teaching in the first two of the above requisites. They were intended to show in the upper grade the results in all. Certainly, if the schools are to teach a good practical handwriting, it must be before the pupils reach the age of fourteen or fifteen years; for, at an earlier age than this, the large majority of the children leave the schools.

Some of the differences in the results reached by the examinations are worthy of special notice. While some, even in the lower grade, could write with legibility and considerable ease, and some with apparent freedom and an approach to elegance, others in this grade were obliged to use the Roman letters to write their exercises, and even then mingled the capital and small letters in a promiseuous manner.

Where the writing is neglected in the lower grades, the time lost cannot be regained in the grammar schools; the result is, that much poor writing is done by pupils just ready to graduate from the advanced classes of these schools.

The lithographs appended to the report are facsimiles of the penmanship found in the schools; the best and poorest are selected from scores not dissimilar, while the average papers are fair samples of hundreds of their kind.

So backward are some of the schools in penmanship, and so forward are others, that there are many primary schools whose upper grade is more advanced than the upper grade of many grammar schools. The causes for this difference are found chiefly in the time and manner of learning to write. If the children are employed for the first three or four years mainly in calling the words of the reading-books, in committing to memory lists of words for oral spelling, in studying and reciting arithmetical tables and problems, with possibly the pages of a primary geography; if they make little or no use of the slate, and none whatever of paper, for written exercises, or if they use these simply to write out in Roman letters the words of their spelling-lessons, and to make the tables in arithmetic; if they have no systematic teaching in making even these forms, and none whatever in making the script letters or in drawing lines and figures, -it will not be surprising if excellence in penmanship should be rare even in the higher grades of the schools.

The absence of early training is perhaps the most evident in the way the children make the numeral characters; the figures are too often significant as signs of aimless teaching, and want of discipline in the taught, but are awkwardly made and inelegant as symbols of numbers. Yet there are but ten of these signs used to express the innumerable calculations made with numbers. What can be more profitable in the early training of the pupil than to teach him to form each of these characters after a perfect model? Contrast the ungainly 5's and 8's of some of the pupils with the beautiful forms of others, and it will appear at once that the culture of the mind will pay a thousand-fold for all the time and labor required to teach the child to make these useful forms with taste and elegance; for the difference in the figures is a trifle compared with the mindculture implied in coming to the results.

Neglect to teach the proper forms of letters and figures occasions much groping by the children. As an illustration of this neglect, a large number of children introduce after o, in certain words, a superfluous character resembling an i; the

error referred to may be seen in the appended lithographs, for example, on page 236.

The writing in many schools is limited to what is done in the copy-books; this is especially true of the mixed and ungraded schools. The practice of writing is deferred till the pupil is old enough to use the pen and ink. The copy at the top of the page is written again and again, sometimes with a wider departure from the original at each repetition. No attention is given to the movement of the arm or hand, or to the forms; and very rarely, so far as I could discover, are the muscles trained to make movements with rapidity. This, I incline to think, is a universal failure in the schools.

In teaching penmanship, the object is to train the muscles to move from habit. Legibility should not be sacrificed to celerity of movement; and with proper teaching, it need not be. But where the pupils, in the examinations, have attempted to write rapidly, the result has been a fearful disregard, in most instances, of the elements of uniformity.

Most of the faults in the writing indicate imperfect teaching. There are schools, however, where, from the time the pupil enters the lowest class, he is trained to the use of the pencil, first with the slate, afterwards with the paper. In some of the best primary schools, most of the time not spent in the class is occupied by the children in making words and sentences, or letters, upon their slates; they are employed in copying these from the lessons the teacher writes upon the board. This process goes on for the first two years, the exercise being varied by copying from the reading-book, or the writing of sentences the pupils themselves have composed. In the third year, paper with proper ruling is substituted for the slate, and the pupil begins critically to analyze and form the letters, and systematically to combine these into words. In the fourth year, the pupil begins to use pen and ink, with the great advantage of a knowledge of all the forms of the letters, and considerable skill in using the muscles of the hand and arm.

This plan is pursued most largely in schools where the reading is begun with the script letters. Writing is employed in connection with every branch of study, and frequently in the recitation. Little reliance is put upon the copy-book for the large practice necessary to make writing easy; this is incidental to the expression of thoughts upon paper. The result is, the

pupil at an early age has a handwriting with the proper slant and connecting lines; elements so difficult to secure if the words are first made in the Roman letters.

An opinion has been confidently expressed by those competent to judge, that, where drawing and writing are taught together, the writing is better than where writing alone is taught, and that, even though no more time is given to the two branches than is frequently given to the writing. The examinations go to show that this opinion is well founded.

The observations in the schools, then, indicate that the best results are secured by having writing with the pencil begun early, and continued constantly till the pupil can use the pen; that as soon as he has mastered this, and can make the forms with accuracy, he needs special training in rapidity of execution. They show that the best results are reached in those towns and schools that have made the most systematic use of the script letters in teaching to read, and where drawing is also taught.

The wide range of percentages in writing in the primary schools is due to the change which has in the past few years taken place, in favor of using the script letters early. The towns that began this practice first, and have adhered to it most closely, have better writing than those that have deferred writing till later in the school course. Undoubtedly the plan, now becoming so general, of teaching the use of script letters and writing early, will have the effect to produce greater uniformity in coming years.

SPELLING. — The end to be secured in teaching spelling is the correct spelling of the words the pupil meets with in his studies, and those he will be most likely to use after he leaves school. These will include the names of familiar objects, of common qualities and actions, and some of the less significant words of the language. The spelling of the names of the days of the week, and of the months of the year, may be specified as words which should be early taught.

To secure this end there must be practice by the pupil in writing the words not simply for spelling from dictation, but in sentences and in composition exercises. The results cannot be satisfactorily reached by any amount of oral spelling. Repeated use of carefully selected words in written exercises, when the attention is not directed solely to the spelling of the words, is the only means of making practical spellers.

In selecting words for drill, those which are in common use should be chosen, and of these the words which are pronounced alike but spelt differently need special attention. In the upper grades, words which come under the common rules should be spelt till the rules can be readily applied: such are the rule for dropping the final e of a primitive word when a syllable is added which begins with a vowel, the rule for doubling the final consonant of an accented syllable when a syllable is added which begins with a vowel, and the rules for forming the plurals and possessives of nouns.

The results of the examinations indicate that far too much reliance is placed upon oral spelling, and that the words are not selected with discrimination on the part of the teacher; they show that the commonest words are misspelt when used in sentences or composition, while words of difficult orthography are spelt with accuracy when dictated for spelling. Thus the words, "too, their, there, here, hear, meet, piece, where, which, whose, been, pair, sure, sugar, week, weak, you, write, right, wrong, father," &c., were misspelt when used in composition by the same class of pupils who spelt "deluge, colonel, deterring," and "supersede," from dictation, with accuracy. The words, "whose, which," and "father," when spelt orally, were generally correct, but when written in sentences they were frequently, in many schools, in a majority of cases, erroneous.

The correct spelling in the primary grade of the words dictated with reference to spelling, also of those given in sentences, illustrates the necessity for spelling in the sentence.

The correct spelling in this grade for the whole county was marked as follows:—

Words dictated for spelling Words written in sentences			, was	ste, ro	ode, s	ail")	•	•	PER	64.8
(Ten words) average		•		•		•				58.1
("which").									69.	
("whose").	•			•	•	•			54.	
("scholar").				•	•	•		۰	44.8	
Average of the above three	e wo	rds		•	•	•	•	•		55.9

The same differences are seen in different towns, and in different schools of the same town. And the towns and schools that have the highest average percentages in all the branches taught, generally have the highest percentages in the spelling of the words in sentences and of words in most common use. If one will take the pains to form tables of the schools of a town, he will find that the results in general show that teachers of skill and experience recognize the necessity of selecting for special drill the common words, and of having these words repeatedly used by the pupils in written sentences.

Table showing the Average Percentages of Correct Spelling in the Several Towns, in the Schools of the Primary Grade.

ALL St	rudies.	Words written in Sentences.						In Column.	
Town.	Per Cent.	Town.	Ten Words.	Town.	"Which."	Town.	"Whose."	Town.	Four Words.
C.1 L. E. D. P. T. R. B. U. A. S. I. F. G. J. O. V. Q. W. M. N. K. H. X.	82.1 69 68 64.6 62.7 62.2 61.4 61.4 60.8 59.7 56.7 56.1 55.2 53.3 51.2 49 48.3 42.8 41.8 40.5 40	C. L. E. P. T. D. B. I. F. G. Q. R. S. U. V. W. A. J. O. N. K. M. H. X.	91 69 67 66 60 59 58 57 57 57 57 57 55 54 44 42 39 39	C. L. E. T. S. P. W. G. U. N. D. J. I. B. A. R. F. H. K. Q. M. O. V. X.	92 87 84 83 82 76 75 74 72 72 69 68 65 63 62 61 55 53 49 47 445 43	C. E. Q. I. W. F. X. T. P. B. D. V. A. U. N. O. L. K. G. S. R. M. J. H.	95 76 68 59 59 58 56 56 54 51 50 49 47 47 47 43 43 38 37 31 27	C. L. F. A. U. B. Q. I. D. R. W. G. E. P. S. V. T. J. O. N. K. H. M. X.	89 76 76 75 74 71 70 70 69 67 67 65 64 63 62 61 57 55 48 47 45

The point referred to in the preceding paragraph, so far as the towns are concerned, is illustrated by the columns taken from the primary table and arranged above. The four or five towns that rank highest in the table of average totals for all the studies rank highest in the spelling in sentences, and those that rank lowest in the average totals rank lowest in the spelling in sentences: whereas the results of

¹ The letters of the alphabet designate the towns in the order in which they were examined; A being the first examined, B the second, and so on.

the spelling of the words dictated solely for spelling are comparatively uniform for the towns throughout the county; some whose rank is low in the general averages and in the spelling in sentences taking a high rank in the spelling of the words dictated for spelling, while the opposite is the result with some that hold a high rank in the general averages and in the spelling in sentences.

In general the principles stated above appear to be sustained by the spelling in the schools of the upper grade, — the per cent of correct spelling in the words of the written narrative differing but little from the per cent for the spelling of the ten words dictated for the spelling in that grade; yet the latter were selected as test words, and are generally of difficult orthography, while those used in the narrative are, principally, common, easy words. And out of 1,122 pupils who used the adverb "too" in the narrative, 859, or nearly 77 per cent of the whole, spelt that word incorrectly.

The different spellings of some of the words used in the sentences and letters furnish an interesting chapter for the advocates of reformed spelling. The following are illustrations:—

Spelling of Words selected from the Sentences and Letters written in the Primary Grade.

Carriage. — Carage, carrage, craidge, caradg, carege, carriag, carrige, &c. Sleigh. — Saly, slay, slaig, slaigh, slagh, slaw, sleig, sleugh, sleight, sligh, sley, slew, slave, sleygh, &c.

Tuesday. - Tusgay, tuestay, toesday.

Wednesday. — wanesday, wedenyday, Wedernsday, wednest, Wenday, Wendsday, wensday, wensday, wensday, wenze, Wenzie, Wendsstay, wenstday, Wesday, Whensday, winday, Windday, Winsday, &c.

Thursday. — thirsday, thirsdday.

Friday. - friddie, fryday.

Saturday. - Sarty, sateday, Satterday, saterbay.

February. — Feabuary, febabery, febary, Febaury, Feberiry, Febouay, Febrery, Febury, February, february, february, february, fepurary, fepurary, &c.

The following methods, most of them used several times, for spelling the words, "whose," "which," and "scholar," were noted in correcting the sentences:—

whose,	whse,	whouses,	How,	hus,
whos,	whhose,	wos,	Hoew,	huse,
whos,	whors,	woes,	Hoys,	hurs,
who.'s,	whotes,	wo,	ho,	hors,
who.,	wher,	wose,	hos,	Hhose,
whuse,	wheir,	wow,	ho's,	Hhoes,
whoes,	what,	wous,	hosse,	Hhows,
who es,	whos'se,	wouse,	hoo,	hohe,
WHoes,	who'se,	woh,	hoos,	hoores,
whoe,s,	who''s,	wohes,	hoose,	Hwose,
wh,	who'ees,	wohse,	hooes,	Couse,
whoe,	whoe'se,	wohose,	hou,	Does,
whes,	whou's,	waese,	hou's,	Ohoes,
whis,	whous,	wraes,	house,	Thouse,
whoses,	whoes,	wlo,	houes,	Yhose,
whees,	who ^{es} ,	wloes,	hourse,	Yous,
whoarse,	who'es,	wlaes,	how's,	loo,
whou,	whoe's,	Hoes,	howes,	ows,
whouse,	whos'e,	Heus,	howus,	owhs,
whoues,	whoos,	Hose,	hews,	whoise.
whows,	whoose,	Hows,	hewse,	
whs,	whoas,	Hous,	hoe,	
which,	whch,	whach,	whise,	whitn.
whick,	whek,	whuch,	whic,	with,
whitch,	wihch,	whiCh,	whir,	weeth,
whtch,	wic,	whigh,	whis,	whics,
wihtch,	wich,	whish,	whit,	wlich,
witch,	wick,	whist,	whah,	Hhich,
wieth,	wech,	wihich,	whih,	hich,
wietch,	wch,	wichich,	whoh,	wotch,
writch,	weich,	white,	whi,	eitch,
witck,	wach,	whitcer,	what,	wihe.
witbh,	wuch,	witcee,	whet,	
witgh,	wish,	whice,	whit,	
Cholar,	choles,	col,	Clolor,	coler,
Cholea,	chaler,	colars,	clollar,	color,
Choler,	chalour,	colors,	ċochlar,	collor,
Chooler,	Cho,	collar,	cohlar,	collores,
Cholor,	chola,	coller,	coholer,	coarlor,
Choolor,	cholla,	collere,	cohooler,	colln,
Chollar,	choolar,	callar,	caod,	corler,
Chollor,	choulder,	callor,	coolla,	Scalar,
chorllar,	Ccholar,	callores,	collr,	Scohlar,
cholur,	Cchollar,	caullar,	clolar,	scloar,
chouller,	Ccolar,	celler,	cloler,	sclore,
choled,	Ccolor,	corlal,	colar,	sclolar,

sclolor,	scoler,	scholard,	scharl,	sholor,
sclolore,	scolor,	schoollar,	scharar,	shoolar,
sclollar,	scorlar,	scholer,	schroher,	shaller,
sclooler,	scorl,	scholoor,	schote,	shallay,
scolla,	scolary,	schalar,	schoa,	shela,
scolle,	scorlor,	schalor,	schor,	sochar,
scollo,	scooler,	scholler,	schar,	sohlor,
scollor,	scorler,	schollor,	schoar,	solars,
scollere,	scloror,	schallar,	schooar,	solar,
scoblar,	sclow,	schaller,	schoal,	Sollar,
scoer,	scroaler,	schallor,	schoaler,	Soller.
scllar,	scollar,	schoolen,	schooioir,	solocar,
sclar,	scollare,	scheler,	schulier,	solor,
sellor,	scorllor,	schler,	school,	Soler,
scotler,	scoller,	schlire,	scholorer,	sollor,
scallar,	scoollor,	schller,	schouler,	sallar,
scaller,	scullier,	schole,	schorar,	saller,
scallor,	schoolar,	scholr,	schoorar,	salbor,
scallas,	schooler,	schols,	schotler,	saaol,
.SColor,	schoolor,	scholse,	skooler,	saoler,
scaler,	schorlar,	scholae,	skollar,	secoler.
scalor,	schollar,	scholal,	skolar,	selor,
scalere,	scholor,	scholas,	skoler,	soci,
scoolar,	schoalar,	scholes,	skoller,	Stole.
scoolor,	schorlor,	scholla,	skorler,	гоца.
scolai,	schoor,	schollaa,	skuler,	
scolal,	schola,	schollie,	stoler,	
scolra,	schooloer,	scholliar,	shoar,	
scorlorr,	schlar,	schoola,	sholar,	
scarlar,	scholaa,	schoole,	shoilar,	
scarlor,	schol,	scholare,	shollor,	
scrollies,	schlor,	scholore,	sholer,	
scoaler,	scho,	schaalore.	shlar,	
scolar,	schoer,	schoorlar,	shorloir,	
		,	,	

But perhaps the greatest ingenuity is displayed in the spelling of the word "depot," a word, if not a place, daily in the presence of most of the children of the county.

For the spelling of this word the pupils have invented the following ways:—

bepo,	deapho,	deapo,	deappow
beapo,	deaphow,	deapoe,	deapto,
dapa,	depto,	deapohl,	deopy,
daper,	depoirt,	deapohoe,	despot,
dapo,	deop,	deapou,	deupo,
dapot,	deopo,	deapot,	dipo,
deapot,	deopot,	deapow,	doopo,

dopho,	dephoe,	nepow,	depote,
dedpod,	depo,	tepot,	depott,
deepo,	depoa,	teapot,	depow,
deeper,	depoe,	depore,	depper,
depa,	dopot,	deport,	deppot,
depe,	deto,	de Port,	deppowe.

Several attempts to substitute "station" for "depot" have resulted in a variety of forms: "stachan," "stacion," "station," "stachan," "stashun," "stasin," "stating," &c.

Little attention appears to be given in the schools of the higher grade to the well-established and quite common rules for spelling; such words as "denies," "deterring," "fitted," "taking," "disputing," "deciding," and "changeable," are generally no better spelt than the words "deluge," "decency," and "colonel." The spelling of a noun in the possessive case is too frequently incorrect.

A very large number of errors result from indistinctness of articulation, and from mispronunciation, or from coincidence in sound of word or letter: the pupils spell as they pronounce. Where they write words but seldom, these errors are frequent. The following from papers of both grades, are examples:—

Words misspelt on Account of Errors in Pronunciation, Coincidence in Sound, &c.

Any, ane, enny. Affectionate, effectionate. Age, edge. Against, aginst. Along, alond, alon. Albany, albuny. Amongst, amunt. Animals, anables. Answered, answared. Appoint, point. Arithmetic, rithmes. Arrive, awrith. Ask, ast. Asked, asted. Because, becouse. Been, ben, bene, bin. Beautiful, beuful. Big one, big yon. By and by, bimeby.

Birth, birt. Book, bok. Boston, bostone. Brother, brouther. Both, bouth. Boy, poy, bou. Carriage, cridg, &c. (Previously given.) Character, caricter. Chance, chanch. Chose, choosed. Change, chained. City, sitty. Close, clost. Coasting, costin, coistain. Closed, clost. Coat, coot, coth, cote, goat, coate. Come, cone. Consent, conset.

Coming, comin, commun, gomming, comming. (The last quite common.) Colony, colonry, colonly, colomol, condley, conly, conley, connelly, conry, cornley, &c. Cousin, cusing. Custard pie, custed puy. Decide, discide. Decision, dision. December, decendber. Determined, dertimg. Disposition, dispersition, dispotion. Daughter, dorter, doughter. Dear, deer. Educated, edcated, eddicated, edecated, egucated, edjucated, jucated, &c.

Eggs, ages. Elbow, elboa. Every, evry. Everything, everthing. Evening, evning, eveings. Evil, eval. Elephant, eliphant. Enjoying, enjoyern. February, February, &c. (Previously given.) Fishing, fithing. Friend, phen. Frightening, frighting. From, fron. Going, goin. Going to, gointer. Good deal, goo deal. Good, goot.

The temptation is strong to extend this list, as I might do, through the alphabet. Most of the words are so common, and appear so simple, that they are quite likely to be overlooked by the inexperienced teacher.

I will venture to give a few additional forms, some of which have proved puzzles in the work of examining the papers; thus:—

Pencle, hotail, yourse, hoapink, hotaill, thanks Gifen, ogin, ogine, quarling, severl, smawl, Marchusses, toalt, masers, Usted, Yousted, Yock, splensy, wanter, thair kink, meachu, New Lin Cling, ol cone, auter, wasant, vestan, ferthur, ihed, trewly, perients, vere.

This class of errors as bearing upon the speech and reading of the pupils, as well as upon their spelling, is very suggestive. Errors of the kind are almost limitless, and not confined to any one part of the county, or to either grade of the schools. Some can be excused, having their origin in the foreign nativity of the children or their parents.

There is no other way so good for discovering these errors as to have frequent written exercises; the quick ear may detect the errors, but the eye is a more certain means, and the pupil who has formed the habit of mispronouncing or of misspelling the words will need to be corrected many times before he will pronounce and write them with accuracy.

The analysis of words by sounds must tend to diminish this

class of errors. My observations were not made with sufficient care to speak of the results in spelling in the schools using the phonic analysis. It has a marked influence upon the reading, and no doubt has also upon the spelling.

The excellent results reached by some of the schools justify specifying the details and the philosophy of their methods. Those schools in which reading is taught by showing the pupil the word, and requiring him to write it upon the slate before spelling it out orally, evidently secure the best results. The reason seems to be that the pupil, seeing the word as a whole, and making it, gives a more prolonged attention to the arrangement of the parts; a more definite and so more lasting impression is thus made upon the mind. In one of the towns of the county, oral spelling has of late been entirely abandoned. Oral spelling has its uses, but it may safely be subordinated in the early part of the course; the lowest classes in the schools of the town referred to certainly excel as spellers.

In another town the children have no oral spelling till the third year. That town ranks highest of any in the county in spelling. Here the uniform method in teaching words is to present them upon the blackboard in script letters. The pupils learn the words as they do the letters, by seeing and forming them many times upon the slate or board. The results, in these and in other towns that pursue the same plan in whole or in part, confirm the theory long held by the most experienced educators, that the object and word method of teaching beginners to read, with the constant exercise in writing, is the best means of making good spellers.

Evidence upon this point is also found in the fact, that, in towns that have changed to the word method within three or four years, the younger members of the upper primary classes spell words they have seen but once, better than the older members of the class, who were taught by a different method. The powers of observation seem to be better trained by the object and word method. To show the want of this training in the schools, an illustration may be taken from the spelling of the word "Cyrus" by the pupils of the grammar schools. In the reading of the narrative, this word passed under the eye of each pupil several times, but a few minutes before he wrote it, and yet there were a score or more of different ways of spelling it in the written exercises. Among these were, Ceyrus,

Cirus, Cyras, Cyrpus, Cypress, Cyrus, Cyprus, Cyprys, Cypry, Cyreus, Cyrous, Cryus, Cryas, Cruyous, Cryrous, Cyus, Cuyus, Cuyrus, Curcus, Curius, Scyrus, Syrus, Cyrecuse, Xyruse, Crysou, Crus, Crysis, Crysoe, Cecil.

The conclusions to which the examinations lead are that spelling should be largely by writing, and incidental to composition, rather than orally and in set spelling lessons.

Table (A), appended to this report, previously referred to in connection with reading, shows how generally in the primary grades throughout the county, script letters are being substituted for the Roman, in teaching to read, and indicates that written is being largely substituted for oral spelling. While the abandonment of oral spelling altogether is not likely to become general, the tendency to recognize writing as the practical method of learning to spell shows real progress in teaching.

Many persons are looking forward, some more, others less, hopefully, to the time when there will be a character, and only one, for each sound in the language; and when it will only require accuracy in pronouncing, and knowledge of the signs, to spell any word correctly. Till that time comes, to fail in this difficult art will be unscholarly, though the greatest accuracy in it may be no sign of great scholarship.

Composition. — The ability to express thoughts upon paper is an important practical end to be aimed at in the schools. To reach this end, exercises in writing should be begun in the first primary class the child enters, and continued till he leaves school for practical life. There should be grades of composition exercises, by which he shall acquire the habit of expressing the products of his various powers, of observation, of memory, and of imagination, and by which he shall learn properly to arrange the parts of a theme when his reflective powers are fully in action.

This implies a special training of the powers of the mind, and a constant use by the pupil, of language to express the activities which are incident to this training. Most that is mechanical in composition-writing can be early taught; for example, the correct orthography of all words the pupil employs, the proper use of capitals, and marks of punctuation,—certainly the period used in abbreviations and at the end of a sentence, the interrogation-point in asking questions, and the capitals for the pronoun I and at the beginning of a sentence.

The pupil can be taught to leave a proper margin, and to divide his words when he has occasion to do so, as at the end of a line, between syllables. He may also at an early age be taught to make a proper selection of words and arrangement of clauses; and if correctly trained he will be able to avoid ungrammatical forms of expression, and to use language with some propriety as to style. At least, the teaching should tend to produce these practical results.

The exercises submitted in the examinations of the schools were designed to test the ability of the pupils to do the mechanical part of composition-writing. The letter written by the lower-grade pupils tested their knowledge and skill in placing the date, address, and subscription, in using the proper address and complimentary expression, and in arranging in proper form the body of a letter; it tested their handwriting, their knowledge of the use of capitals, of spelling, of syllabication, and a few marks of punctuation. Beyond this the pupils were left simply to make a proper use of words in sentences in expressing thoughts created by their own imaginations and suggested by the experiences of common life. As a test the narrative written in the upper grade was not essentially different in kind; the result depended upon the judgment rather than upon the imagination, and required a little more knowledge of mechanical arrangement, for example, in placing the marks of quotation.

In many respects the schools, and the individual scholars of the same school, showed the greatest contrasts; while some schools were fully supplied with all the materials for the written exercises, pencil or pen, paper and ink,—the pencil, ink, and pen in good condition,—others were wanting in all materials for written exercises, except the slate and pencil, which are generally found in all the schools of the grades examined. In a majority of the schools the materials which the examiners went prepared to supply were put in requisition. The absence of even the materials for written work, in so large a number of the schools, is too significant a fact to need any comment: it has an evident bearing upon the question of supervision.

In the mechanical execution of both the letter and the narrative, there was the same contrast in different schools as has been indicated in the materials for writing. With some the exercises seemed nothing unusual: the margin required, the date, address, &c., of the letter, and the title of the narrative,

received attention as if they were matters of course. The pupils of some schools, after the materials were placed in their hands and the directions were given, sat in apparent amazement, as if the most unreasonable demand had been made upon them: to some, indeed, the directions were at first incomprehensible, and had to be many times repeated. Nor was this condition limited to the lower grade of pupils. Some even of the grammar grade, after dipping the pen in ink, had nothing to write, and finally returned the paper, except for a few broken sentences, as blank as when it was given them. Very many of both grades gave evidence that they had never been taught even the mechanical part of any composition-exercise: their spelling was poor, capitals were wholly wanting, and no punctuation was attempted; there was no idea of the arrangement of parts of the letter or of the narrative. This is evident in the papers of which facsimiles are given later on in this report.

To show how little attention is given in many schools to one important particular, syllabication, the following words, occurring at the ends of lines, have been taken from the written exercises. The division made by the pupils is indicated by the hyphen; thus:—

al-ong,	evenin-g,	judgme-nt,	shou-ld,
bo-ys,	exchan-ge,	la-nd,	sma-ll,
bo-y's,	excha-nge,	mu-ch,	sm-all,
bef-ore,	goin-g,	pa-ssing,	stro-ng,
carria-ge,	goi-ng,	pr-esent,	too-k,
comm-and,	go-od,	pon-d,	thou-ght,
comin-g,	goo-d,	propose-d,	inju-stly,
ch-ange,	ha-ve,	punis-hed,	wante-d,
dec-ide,	ho-me,	sa-id,	wrig-ht,
deci-ded,	ho-use,	sai-d,	we-rt,
dec-iding,	huma-ne,	sch-ool,	wh-en,
educate-d,	judg-e,	shoul-d,	wo-uld, &c.

With the exception of a number of schools that are well trained in this respect, the want of attention to syllabication is apparently a general fault.

The proper use of capitals seems to be neglected in a very large majority of the schools till the pupils enter the grammar grade, and sometimes till a late period in that. Where the pupils early learn to make the proper use of the capital letters, very few errors are found in their written exercises when they

reach the grammar school; some of the narratives, and even the letters written in the primary grade, are models in this respect.

But punctuation is the most neglected of any thing in the mechanical part of the written exercises; though there are a few towns in which most of these marks are employed with an approach to accuracy by children nine or ten years of age. The absence of these in a great number of the papers has materially increased the labor of examining and marking; it is often quite impossible, without several readings, to discover the meaning of the writer.

It would seem that letter-writing would be one of the early forms of elementary composition taught in the schools, since its practical value is so easily comprehended by the young learner. All that relates to the forms is so nearly mechanical that it can be easily taught.

For want of the proper training in this kind of composition exercise, the letters of those children who have had occasion to do some writing in a practical way, abound in such expressions as:—

"I take my pen in hand to let you know;" "I take my pencle in hand;"
"I thought I would write you a few lines;" "I now set down to address
you;" "I now sit down to pen you a few lines;" "I write you these few
lines hoping to find you in good health;" "Hoping this will find you in
good health as it leaves us at present;" "It is with the greatest of pleasure
that I now take up my pen to let you know that I am in good health, and
hope this may find you enjoying the same blessing;" "As I have a few
minutes, I thought I would write to tell you that I am in good health, and
hope you are enjoying the same blessing;" "This is all I can think of, so
no more at present;" "I can think of no more to write, so will close."

A large number of the letters addressed "dear father," or "dear mother," close with "yours truly," "respectfully yours," and several with "your affectionate brother." Not a few state as the cause for writing, that they "have nothing else to do;" thus: "Dear mother: I thought as long as I was seting here doing nothing i wood write you a few lines;" "I thought I would write; you as long as I had nothing else to do."

Throughout, the letters employ a few special adjectives for limiting a great number of different nouns; thus: "a good time," "a good long vacation," "a good scolding," "a good licking," "a nice skate," a "nice visit," "a nice time," "an awful

nice day." The word "nice" is frequently found two or three times in a short letter: it is employed several hundred times in all that were written; and the word "splendid" is used to express every form of pleasing emotion, and every kind of thing which excites it: thus we have "splendid sleigh-rides," "splendid teachers," "splendid times," "splendid pies," "splendid coasting," "splendid butternuts," "splendid days," "splendid paper," "splendid luck," "splendid weather," and "splendid potatoes."

Letter-writing presents the occasion for the exercise of feelings of friendship and filial regard; it affords an opportunity for teaching the pupil to apply those expressions of respect and endearment, which, if they do not naturally arise from the pupil's own feelings, must, by their appropriate use, tend to awaken in him emotions to correspond with the expressions he employs. Where letter-writing is common in the schools, the polite forms of expression contrast most agreeably with the language where the children are not habituated to it. In one town where letter-writing is prominent as a primary-school exercise, the letters are crowded with happy expressions which indicate a corresponding spirit and temper, occasioned, no doubt, in part, by the exercise itself. On the other hand, there are entire sets of letters in which such expressions are rare; while there are many which by their coarseness offend every feeling of delicacy, and indicate the absence of all refinement in the writers. What numerous occasions written exercises would present to the skilful teacher for refining away the dross of the rude material upon which he so often is called to work!

The papers of some schools abound in such expressions as the following:—

"The other boys made him their boss;" "I am having a boss time" (addressed to "grandmother"); "He always wanted to be boss;" "He liked to be boss;" "He give the umpire a thrashing;" "He thrashed me;" "He flogged me;" "He said he had been flogged;" "He punched him;" "He got lickin;" "He went for him;" "He come for me;" "He said he had learned a licking;" "I have learned to get a leaking;" "Master licked me;" "What did he lick you for?" "Master beat him;" "There was two boys fussing about some coats;" "This made the larger boy mad."

The following, though less uncouth and offensive, are still wanting in delicacy:—

"You come in a slay after me" (addressed to "farther"); "You have the horse to the depot" (addressed to "father"); "Bring the horse to the depot for my trunk" (addressed to "mother"); "Send a sleigh to meet me at the depot;" "I want you to come to the depot;" "Fetch up a sleigh to the depot."

The following illustrate the use of strong language:—

"The big boy said to the little boy to swap with him;" "The big boy grabbed hold of the coat and flung his to him;" "He wanted to trade;" "They wanted to swap coats;" "Persian was raised with a lot of other boys;" "They were jangling over their coats."

In contrast with these are such expressions as the following:—

"I was punished;" "The small boy would not consent to the proposal;"
"I should be glad to have you come to the depot to meet me;" "Send the carriage, please, to meet me;" "I hope you will be able to meet me;"
"Please send to the depot for me;" "I would like;" "Please come," &c.;
"I am very happy here, dear mother."

Who can fail to discover a widely different spirit in the writers of the following two letters written by boys in the primary grade?

LYNN jan 29th 1879.

Dear Mother, — I am coming home Saturday. Send a sleigh to meet me at the depot. I had a good fight you bet.

[Signed]

LYNN MRS'

Jan 12 1879.

im comming home dear mother and im liveing very happy and i want you to meate me at the providense rode

[Signed]

The penmanship of the first of these letters was marked fifty per cent; of the second, twenty. The children were about of an age, between nine and ten years. Could time be more profitably spent by the teacher, than in calling out the sensibilities and correcting the uncivil habits of one of these pupils, and in helping the other to clothe his gentle thoughts in correctly formed words?

The papers of an entire school, in a few instances, were characterized by a formal and stilted style of language, which exactly expressed the whole air of the school; others showed a heartiness and simplicity that were charming, and at times almost betrayed the examiners into forgetfulness of the errors

the children were making. In a few instances, there was a freedom of manner which created a seeming indifference to the results of the examinations. Sometimes this spirit manifested itself in verbosity, and the words used were quite out of proportion to the ideas expressed. An illustration of this is found in the narratives, where in twenty lines, which is the average length, not half the story is told. The last named fault occurred so seldom as to be hardly worth mentioning. It is a fact, however, I think, that in the schools where "language lessons" are most taught, the children are liable to disregard the thought, and multiply words merely for the sake of the expression. It may not come amiss to repeat the hint already given, that the teaching of language implies something more than teaching to use words: it necessitates first the teaching of that which the language names and describes. Language should not be mistaken for an end in itself: the end is the thought, and language is for the expression of that.

Among the papers taken in the upper grade, there are many in which the pupils show a clear appreciation of the story, and good judgment in seizing upon and in arranging the important incidents of the narrative; and yet the style is poor, the expressions are ungrammatical, the writing is cramped, and all that relates to the mechanical execution shows faulty or neglected early training. For want of these simple and easily acquired elements of primary instruction, the writer is often placed for life at disadvantage with persons who have far less genius, but who have power to express what they know. Intelligence wanting the means of expression enlists our sympathy far more than shallowness which drapes itself in a frippery of words.

The grammar of the exercises is generally conformed to the habits the pupils have in speaking the language. In the papers of both grades a few errors are committed over and over again, thus:—

"The was two boys;" "They was two boys;" "How is all the boys?"
"Things that was good;" "They is not many here I know;" "He give him his coat;" "He come to school;" "I see him yesterday;" "He asked Cyrus what he done that day;" "I seen the boys disputing;" "I had saw him;" "He had wore a coat;" "Who teached him;" "He throwed his coat;" "He said each one keep their own coats;" "Who the coats fitted;" "Who it would fit best;" "Boys which he was taught by;" "Two boys which were disputing;" "He had ought to decide;" "He hadn't ought," &c.

The above embrace nearly all the forms of ungrammatical expressions that have been noted in the examination of the three or four thousand papers; the errors are limited to the use of the wrong form of the verb in number or tense, and the wrong form of the relative pronoun, or to the use of the wrong word. There are, in addition to these, errors in the use of words, which are sometimes classed as errors in grammar, thus: -

"Boys with whom he played with;" "I was to Boston;" "I said for the little boy to have the little coat;" "I said that the big coat for the big boy;" "Have the sleigh to the depot;" "Cyrus was learnt every thing;" "They tried to learn him."

The word "got" is often erroneously used, as: "I got a punishing to-day;" "got whipped," and so on. And, as was illustrated under errors in grammatical expression above, the and they are often used for "there."

These errors, which are repeated, one or other of them, hundreds of times in the papers examined, show that the study of grammar fails to teach the pupils "to speak and write the language correctly." The errors occur almost as frequently among those who study grammar, as among those who do not. The kinds of errors are few, though so often repeated. avoid them, the pupil must learn, not by committing rules of grammar, but by practice in writing. The correct forms of language are to be acquired, if acquired at all, before the pupil is old enough to study the rules of grammar. The business of the primary school is to furnish to the pupil the occasions for using all those forms of language in which he is likely to err, and to practise him in the correct forms till he employs them from habit. The knowledge of grammar will furnish him with some rules for testing his own construction; but not till his habits are well formed in the use of language, will he have the judgment to apply the tests critically.

The lesson taught by the examinations is, that in most of the schools the children should begin earlier, and have vastly more practice in composition-writing.

ARITHMETIC.

The ends to be secured in the study of arithmetic are the knowledge of numbers and a certain kind of culture which the study is calculated to give. The method of teaching should be such as to lead the pupil to form habits of accuracy and attention, and tend to discipline the powers of observation, memory, imagination, judgment, and reasoning. The first knowledge to be acquired in the primary school is of small numbers: the knowledge is of three kinds, — of the expression, combination and relation of numbers.

Under expression and combination are included the four fundamental operations. These and the solution of simple problems should be taught in the first four years. All that remains of arithmetic that is essential, including practical problems in mensuration and percentage, should be taught in the next four years. With these processes the pupil should be taught the most common and useful abbreviations for lightening the mechanical labor.

The examinations were designed to test the results of four years' and of eight years' work in the particulars above referred to. Accordingly to each grade were assigned an example in column addition, and practical problems adapted to the respective grades. The lower grade had also exercises in the elementary combinations, and the upper grade an example in multiplication and division, which tested the pupils' practical knowledge of cancellation. The results will be seen by reference to the tables which are appended. In the primary grade the average of correct answers for the whole county in elementary combinations was nearly 74 per cent; in the column addition, 46 per cent, and the total average was 60 per cent. In the grammar grade the average for the column addition was 65.7 per cent; for multiplication and division, 68.8 per cent; for simple interest, 42.9 per cent; for the problem in mensuration, 15.4 per cent. The total average was 48.2 per cent; and the average for cancellation, 13 per cent.

Compared with the results reached in some of the schools, these averages are low. There is no good reason why the county as a whole should not stand at least twenty per cent higher. This would give an average of two per cent less than the highest town has at present: it would be but little above the average of some others. While some schools made a satisfactory record, and while the majority of the towns stand fairly, the results in others are not particularly gratifying to our pride as teachers of arithmetic.

Whence arise these differences? There is in the first place

a wide difference in what is attempted to be taught. In some schools, during the first four years, the practice is confined to the exercises of the mental arithmetic. That, with its formal solutions, is literally committed to memory. The ciphering is not begun till the fifth year. Up to this time the pupils are not able to add units and tens expressed in column. In other schools the pupils cipher through the fundamental operations, even before they enter upon the fifth year.

To reach the standard of work attempted in some of the schools of the primary grade, the examination should have been limited to the primary tables, and then the results could only have been expressed orally; while to reach the higher standard in other schools would have required tests in all the fundamental operations, and quite difficult problems in mental arithmetic, with compound numbers.

The pupils of the grammar grade were as far apart in respect to the work attempted, as were those of the primary; some who had been eight years in school having advanced but little beyond the fundamental operations, while others had only reached fractional numbers, and yet others had gone through the arithmetic required for admission to the high school. pupils of one school — all under twelve and a half years of age -had been through written arithmetic preparatory to entering the high school. Of course the work was very superficial: the pupils examined in this school averaged, in addition, 50 per cent; in multiplication and division, 0 per cent; in interest, 50 per cent; in mensuration, 0 per cent,—a total of 25 per cent. In a few cases the tests for the primary grade, with the example in division or with a simple example in fractions, were submitted to the grammar grade, and found to be fully up to their attainments.

Formerly — say, twenty-five years ago — the practice in numbers, for the first four or five years in school, was limited to the oral and mental arithmetic. That practice, as already stated, is still continued in some of the towns. The drift of late has been towards mechanical ciphering; the use of figures being early taught, and the oral solution being entirely abandoned. In some towns these methods are both practised; the children having set lessons in written and in mental arithmetic, and carrying on the two studies as if they were entirely distinct. Here are three methods; and of the old doggerel, —

the first two lines are directly, and the last two inversely, applicable: for among the methods there is little to choose.

A more rational method prevails where the mental process is early expressed in figures, and reason for the written process is made clear to the comprehension of the pupil, who begins in school the practice he is to follow in life: he there combines as he expresses, and expresses as he combines. In this there is no divorcing of things which are by nature joined together.

There are two methods in use for teaching the elementary combinations. By one the whole reliance is placed upon committing to memory the primary tables; by the other, all numbers to twenty, with their combinations and relations, are taught with sensible objects. The one process closes the mind to the thought, and occupies it with a form of words; the other first develops the thought, and then teaches to express it in appropriate forms. It is not hard to see which will give the best conception of the elementary facts of numbers.

Again: there is much study of book arithmetic, but a great neglect of training upon miscellaneous problems outside. arithmetic is of the schoolroom, not always of practical life. The pupils work to get a certain answer, which is appended to the problem. Failing to obtain this, they erase and cipher again; again they fail and again they cipher, till this play with figures makes arithmetic a farce; the practice is bad for the knowledge, and damaging to the mental habit, if not to the moral sense. If, instead of this, the pupil should be compelled to deal with real things, and to find his answer by studying the conditions of his problem, the fiction which arithmetic now is to most pupils, would become to them a reality. Confined to the book and its answers alone, the pupil is often unable, when he leaves school, to do the simplest practical problem; and this is because he has had no practice in this kind of work, and no training which fits him to do independently work of any kind. That he may be able when he leaves school to apply his knowledge, he must be accustomed, while in school, to weighing and measuring, and generally to finding the data for his own problems, and, with these, to working out results unaided and alone.

To one who has not been used to seeing similar results elsewhere, the failure in the simple operations is perhaps the most surprising thing in the examinations. Certainly, to have a fail-

ure here is most serious in its consequences. There were but nine items given for addition in the primary, and but eleven in the grammar grade; with a total average of fifty-six per cent. Why should not eighty or ninety per cent of all the answers be correct? The operation depends upon the simplest elementary combinations; and of these there is a limited number. Good teaching in the primary schools would, in the first two or three years of teaching, fix these fundamentals of arithmetic so firmly, that, no matter what the application, the accurate result would be nearly certain.

The practice with these small numbers should be so thorough in the primary school, that any collection of objects not greater than eight or ten could be recognized and named at sight, and that the presence to the pupil of any pair of numbers whose sum is not greater than twenty, should at once suggest to the mind the amount; or, the amount and one of the parts being present, the other part or difference should be at once suggested. So, whatever the form of language expressing the unions or separations of these elementary combinations, whether words or figures, the results should spring instantly to the mind without the necessity of counting by separate units. With proper training at the outset, the counting with fingers, not uncommon even in the grammar schools, would be nowhere found. In place of this thorough elementary drill, I saw, in a school visited since beginning this writing, the children attempting to recite from memory the rule for finding the greatest common divisor, -a rule which they did not comprehend, and which would be of no great use to them if they did comprehend it. A single instance proves nothing; but this is an illustration which is applicable to many schools.

I was not prepared for so great a per cent of errors in using abbreviated processes as was found in the grammar schools. The papers do not always show what the process was; but evidently the number who abbreviated the work was quite small. The direction to find by the shortest process the result of multiplying a given number by 12 and dividing the product by 72 would seem to suggest dividing by 6 to all pupils who had been taught to cancel; but, instead, many pupils, after multiplying by 12, divided by 72, using short division. If the pupils had been told to do the work by cancellation, there can be no doubt the errors would have been few. As it was, the

percentages for "short process" were not included in making up the averages for the grammar schools.

Another illustration of the want of practical methods in arithmetic occurred in connection with the example in simple interest. The problem given required the pupils to find the time, for example, from Aug. 20 to Dec. 5 of the same year; the pupils in a majority of the schools wished to know the year; and, with most, the time was found by writing down the dates one underneath the other, — year, month, and day, — and performing the operation by compound subtraction. In examining the papers, it was found that many errors in finding the time arose from misplacing the dates, and attempting to subtract the later from the earlier.

It will be seen, by referring to the table of percentages, that the lowest per cent for the examples was obtained for the problem in mensuration. This was given to test the power of the pupils to conceive the form described, and to learn if they were in the habit of constructing diagrams to aid their imagination. The problem was such as is likely to occur in practice, and was not difficult. After repeated explanations and illustrations, some pupils seemed to despair even of comprehending the problem; others proceeded at once to draw a diagram, and then with a few simple operations worked out the result. Where the pupils made diagrams for their example, the work was generally found to be correct.

While some schools were very exact in expressing arithmetical processes, others were equally careless. A common fault is illustrated in the following examples:—

- (1.) $5337 \times 12 = 64044 \div 72 = 889\frac{1}{2}$.
- (2.) $4 \times 2 = 8 \times 4 = 32 \times 2 = 64 \times 4 = 256 \times \$10 = \$2560$.
- (3.) 3 mo. 15 da. = $.0175 \div 6 = .0029\frac{1}{6} \times 8 = .0233\frac{1}{3} \times \$5337 = \$124.49 +$.

Such are the contrasts under different kinds of training. No branch taught in the schools more fully shows the kind and quality of the teaching than arithmetic. If the teacher has definite ends to reach, and has the requisite knowledge and skill, there is no branch where the good results can be more evident. Being without aim, and ignorant of methods, there is no branch where the teacher can do so much to so little purpose.

The question of morals has its place in the teaching of arithmetic. Moral power is the result of moral acts. Do nothing to prevent one pupil from copying the work of another and presenting it as his own, and the result will be a weakening of the moral sense, as well as a want of self-reliance. In quite a large number of the schools the desire to compare and copy was so manifest, that the mind sickens at the thought of the consequences of this bad habit acquired in the study of an exact science.

The method of the examinations was a little embarrassing to many pupils, because they were forced to rely each upon himself. If similar conditions are imposed upon the pupils in all their exercises, they will soon gain facility in doing independent work. With this facility comes pleasure, which always waits upon achievement. This prompts to renewed exertion; and finally a character results having an inclination to moral acts. The pupil comes to feel an obligation to discover and state the exact truth in arithmetic as elsewhere, even to the writing down of a figure; and something like shame is felt, if, for a fault of his, one of these easily written symbols has to be erased.

With the exceptions mentioned, there is to one experienced in similar work nothing surprising in the failures revealed in the examinations. They result partly from a want of thorough drill in the first steps in numbers. They indicate, however, defects in teaching which can be remedied only by a knowledge of the powers of the mind to be trained, and skill in using methods calculated to bring the powers into exercise.

GENERAL REMARKS.

Tables A and B, which follow, are made up from the returns of the committees in the several towns, and from their written replies to a circular addressed to them last November; the questions contained in the circular are published with the explanations of Table A. The object of introducing the tables is to furnish the means of making some comparisons not strictly within the province of the report. Should one wish, for example, to study the method or the cost of superintending the schools in connection with the results of the examinations, should he wish to find the cost per capita of the supervision, or of the instruction of the pupils examined, - he can, with these tables, make the necessary comparisons. With an additional item, — the school-population, contained in the statistical tables of the report of the Board of Education, — he can also see what proportion of children within the proper limits as to age were presented for the examinations, and from this determine approximately the character of the grading in the schools. Tables C and D need no explanations.

The reasons for designating the towns by the letters of the alphabet, and the schools by the numerals, were principally these: first, the mind would not be so likely to turn aside from the results to the individuals, as if the names were given; and, second, the object being to ascertain the results in the schools and towns as parts of the county, it seemed not necessary to use their names. Still, that the towns and schools that rank high may be known and studied by teachers and committees, an index is prepared, which, on application, will be furnished to committees whose schools were examined.

The lithographs which follow the tables are samples taken from the two grades of schools. They represent principally three kinds of written work,—the best, the poorest, and the average. The four "best" letters are selected from the best seventy-five to one hundred letters written in the county, and the four "poor" letters are selected from the poorest seventy-five to one hundred. The four "best" and four "poor" narratives are selected on the same principle.

The average-papers are selected by taking, from all those written in a town, one paper which most nearly represents the average of the town in the items entering into the average of the papers. These samples are designated by the letters of the respective towns, and marked "av." They are arranged in order according to the rank of the towns in this kind of work. The differences in the average-papers are so slight, that, as a whole, they may be uninteresting to the general reader. There is no wish to impose the task of reading them upon any one, unless it be, that, by reading forty or fifty, he may have some appreciation of the labor of reading critically, for several times, the whole three or four thousand.

The examinations suggest many topics which it would be profitable to consider, had not the report already transcended its limits. I cannot close, however, without a brief reference to the influence which methods of teaching exert upon the intellectual and moral character. I am prompted to this by

the many apt illustrations which have come to my notice. I will allude to but one. While my visits were for the purpose of examining the schools in the branches taught, in my notes taken in a town where rational methods of teaching prevail, I was led to say, "I am struck with the conscientious and thoughtful spirit of the pupils in all the schools." Had this been the only compliment to the teaching in that town, it would have been the highest that could be paid, no matter what the percentages obtained. The good spirit of the children was, however, fully matched by the excellence of the results of their examinations.

However important may be the knowledge of reading, writing, and arithmetic, that knowledge sinks into insignificance in comparison with intellectual and moral training. But the effect of my observations in all the schools has been to strengthen the conviction, that the teaching best adapted to increase useful knowledge produces the truest culture of mind and heart.

My experience in other schools for a number of years leads me to the conclusion, that the schools of Norfolk County are not, as a whole, better or worse than similar schools in other parts of our State. The conditions which make schools poor or good are the same everywhere. Their failures result from poor organization, insufficient appliances for teaching, or from the teaching itself. These in their turn result from inadequate support and from an ineffective supervision. The examinations clearly indicate that more depends upon the supervision of the schools than upon all other causes combined. It will be said that the teacher makes the school. True; but the teacher is found or made by the supervisor. An important duty of this officer is to seek the best teacher the market affords; assign him to his place; help him to plan and organize, to remove obstacles without and within. It matters not whether he be called committee-man or superintendent, whether he be paid or unpaid: his success or failure in this kind of work will appear in the teachers and in the schools, and be, more than any thing else, a test of his fitness for the office.

But, it may be asked if the means are inadequate, what can the supervisor do? It will generally be found that wherever there is good supervision the means are not inadequate. Good supervision implies liberality in providing, and economy in administering. But, without the means to employ high-priced teachers, it becomes a far greater necessity, to secure effective supervision. How else are the untried teachers to be shown the best methods? How else are the children to be saved from becoming victims to teaching which is based neither upon training nor experience?

The supervisor of schools has an important duty yet to perform in securing better grading; in the county as a whole the examinations show that the average rank of the older class of pupils in graded schools is nearly 12 per cent higher than that of the same class in mixed schools. No estimate has been made for the lower class; but without doubt the difference is still greater.

While it is probably true that the schools of Norfolk County do not differ on the whole from schools elsewhere, there is a most gratifying interest awakened in most towns of the county in methods of teaching, in courses of studies, and in school supervision, which gives great promise for the future. One important cause for this awakening is the earnest spirit which has actuated the association of school committees of the county in everything they have undertaken. It will be a high honor if my effort in any way advances the ends the association has in view.

By throwing their schools open to the public without reserve, as they have done in these examinations, the committees have invited criticism. It will undoubtedly be liberally bestowed. But, if the motives that prompt the criticism are as sincere and noble as those which have presented the occasion, Norfolk will not be the only county to receive a blessing.

Note. — Since the plates for this edition were cast, it has been decided to print the average lithographs referred to on page 170 for a few of the towns only, including some of the highest and some of the lowest in rank.

EXPLANATION OF TABLE A.

On the following pages is a table showing the method and average annual cost of superintending the schools of the several towns in the county for the three years previous to the examinations.

For convenience of arrangement, there is also placed upon the same page a condensed table of answers to the following questions, submitted to the school committees in the several towns:—

- I. What method was used in your schools by pupils who are now nine or ten years of age in first learning to read? State whether it was the A B C, the phonic, or the object and word method.
 - II. What method is used at present in teaching beginners?
- III. Were those who are now nine or ten years of age first taught to make words in Roman or in script letters?
- IV. Are Roman or script letters used in teaching to read at the present time?
- V. If your children are now taught by the word method, how early do they use the names of the letters of the alphabet in spelling or otherwise?

173

Table A. - Showing the Manner and Expense of superintending the Schools, and the Method of teaching Beginners to

	REMARKS		R.S.; some After 6 mos. "If a A B C is used, it is done recently S.				"Use names of letters in writing	"A B C learned at home."				After 6 mos. Wall use script, and make good progress."
When Pupils who learn to read by Word Method	first use Names	or the Letters of the Alphabet in Spelling or oth- erwise.	After 6 mos.	Early in most	cases. After 2 yrs.	ì	After 1 yr. After 1 yr.	At first.	At		first year.	After 6 mos.
FORM OF LETTERS FIRST USED BY PUPILS IN MAIC- ING WORDS: ROMAN (R.)	?	Now used in Schools.	R.,S.; some recently S.	alone.	α̈́		တ်တံ	Generally	R., S.,	equally.		s <u>i</u>
FORM OF LETTERS FIRST USED BY PUPILS IN MAIC- ING WORDS: ROMAN (R.)	OR SCRIPT (S.)	By Pupils examined.	R., S.	R. gener-	ally.		ಡಚ	Ŗ.	R., S.,	early. R. on	board, S. in copy-	books. R.
METHODS USED IN FIRST LEARNING TO READ: A B C, OBJECT AND WORD (O.W.),		Now used in Schools.	O. W., P.	W.	O.W., P.,	•	, O. W. O. W.	ABC, P.,	W., ABC,	ABC. W.P. with	teachers competent.	W.
METHODS US LEARNING TO OBJECT AND	PHONIC (P.)	By Pupils examined.	O. W., P.	Various.	A B C; O.W., P.	ceptions.	Ó. W. ABC.	Р.	W., ABC. W., ABC	ABC.		ABC,W.
S WITH ITS FOR PAST		School Committee.	\$500 00	497 83			80 00	218 33	:			123 41
SCPERVISION OF THE SCHOOLS WITH ITS AVERAGE ANNUAL COST FOR PAST THREE YEARS.	SUPERINTENDENT.	Partial or Part Committee. Time.					\$702 50	218 33	• • • • • • • • • • • • • • • • • • • •			193 41
SUPERVISION OF AVERAGE ANN THREE YEARS.	SUPERIN	Exclusive.			\$2,000 00				400 00	85 00		
ated by Order in Schools ed.	sign the nim	Towns de Letters in Which th	Α.	B.	c'		ЬĦ	E.	ن	H.		ï.

"Cannot "Majority learn A B C at home."		"After words are taught, they are analyzed by sound, and spelt by A B C."	"Those taught at home learned early to use A B C."		"Three-fourths taught A B C be-	teachers to teach children to make all forms of letters."		"No effort made to teach alphabet."		"Cannot answer last question defi- nitely."	"No oral spelling in schools."			"Children know their A B C when	ools	by word method. Begin oral spelling at first."
"Cannot	state."	Early as 2d term.	2d year.	3d term.	Early.		Early.	After 1 yr.	Early (:)	Early (?)	Never	After 6 mos.	At first.	Early.	Early.	
R., S.		v.	v.	νż	R. mostly. Early.		R., S.	€ 80.00 14.00 16.	great ex-	ś	ŵ	R., S.	S. mostly.	άøά	R.	
Zi.		R., S. by some.	S. mostly.	" Unable	i i		R. princi-	Pally.	दं	R.	R.	婄	ದ್ದ	iri	.i.	
P., W., in	graded; A B C in mixed.	W., P.	O. W.	O. W.	W.		W. and	purase.	W.,in part.	O. W. on	W.P.	Somewhat.	O. W.	W. princi-	pally. A B C	at home.
. 212 16 All "prob- P., W., in	ably."	Various, O. W.by some.	O. W., P., combined.	ABC.	ABC.		W.	A B C.	A D C.	ABC.	ABC.	Р.	0. W.	٠.	ABC	at home.
212 16		300 25	00 008	433 58	412 50		80 +9	31.9 83	202 00	73 33	93 16		20 00	330 25	25 74	
:				:	412 50		200 00	1,089 17	•	:	:		00 08	00 00	:	
:			:	:									:	* * * * * * * * * * * * * * * * * * *		
J.		K.	بــــــــــــــــــــــــــــــــــــ	M.	ż		<u> </u>	<u>م</u> ز د	 ÷	æ.	ś	T.	Ö,		×	

Table B.—Showing the Average Annual Expenditure, Number of Pupils to a Teacher, and Weeks of Schooling, for Three Years Preceding the Examinations.

т	by Ord	ns Desig Letters ler in	in the which	Average Annual Expenditure for the Three Years Preced-	Average Teachers i	WAGES OF PER MONTH.	Average Number of Pupils to a Teacher.	Number of School Weeks per Year.
		ined.	Lik	ing the Examinations.	Males.	Females.		
A				\$20,583 08	\$115 33 ₁	\$46 18 ² / ₃	31.6	40
В				13,593 97	$121 55\frac{2}{3}$	50 903	26.8	37–1
C				25,166 662	116 777	46 404	38.4	40
D	•			$6,166 \ 66\frac{2}{3}$	$125 \ 66\frac{2}{3}$	41 96	42.7	37–2
E				10,913 331	92 291	$39 \ 97\frac{2}{3}$	43.4	38-4
F				5,000 00	105 55 1	37 75	28.7	39
G	•			10,567 761	77 58	35 59	44.2	34
Н	•			1,800 00	40 00*	$31 79\frac{2}{3}$	22.7	31–3
1		• •		1,933 331	58 57 1	33 22 1	32.4	34-3
J				5,666 662	77 16 1	$35 \ 85\frac{2}{3}$	31.8	37
K				$7,166 66\frac{2}{3}$	93 02	34 17 ¹ / ₃	36.7	30-3
L				13,315 29	123 663	51 25	24.6	40
M		•		6,003 331	$54 75\frac{2}{8}$	38 30	34.2	35–2
N				5,500 00	70 20 1	33 833	24.9	30-4
0				5,000 00	$51\ 16\frac{2}{3}$	36 80	34.2	40
P				23,600 00	104 42	35 69	36.8	38-4
Q				7,050 00	92 50	$35 \ 24\frac{1}{3}$	33.2	40
R				$2,427 \ 53\frac{1}{3}$	85 92	$36 66\frac{2}{3}$	27.8	38-1
S				5,352 50	125 15	$36\ 01\frac{2}{3}$	23.8	37–3
Т				36,966 662	192 163	69 323	31.7	40 .
U				16,933 331	113 55 1	46 19	41.9	40
v				1,139 00	32 00	32 00	17.8	37–1
77	7.			9,333 331	106 933	36 612	38.8	38-2
X	•			1,500 00	37 00†	35 613	23.8	33

^{*} For one year.

TABLES OF AVERAGES FOR PRIMARY GRADE.

EXPLANATION OF TABLES.

THE letters of the alphabet designate the towns, and indicate the order in which they were visited.

The numerals designate the schools with the order in which they were examined.

The numbers expressed in the columns denote the percentages of correct answers given by the pupils reported.

The blank spaces indicate that the pupils were not examined upon items expressed in columns where the spaces occur.

Note. — The total average for each school was made up from the percentages in the branches in which that school was examined.

In making up the total average for the town, when the examination of a school in any branch was omitted, the school was allowed the percentage of the other schools of the town in that branch. In making up the total average for the county the same plan was pursued.

TABLE C. - Report of Examinations of Children between Eight and a half and Ten and a half Years of Age who have attended School on an Average Four Years.

Fowns.	
AND .	
SCHOOLS	
OF	
ERCENTAGES	
4	

	.els.	Атегаде То	50.6	57	67.4	49.2	49.9	51.4	623	58.6	76.7	61	59.7	62.4	500.2 56.3
		Average.		0	68 88 88	36	27	31			-	51	52	70	70
TER.	Date, Address,			1	2 2	31	25	31			_	53	51	69	54
LETTER.		Spelling, Punc- tuntion, &c.		-	10	50	30	36				45	26	64 48	25.
	Ex-	Thought and Ex- pression.		1	73	28	25	26				56	20	**************************************	*08 *08
		Average.	54	69	00 CC	50	48	55	65	55	09	53	57	552	338
READING.		Expression.	48	64	50.4	49	50	55	.09	50	58	49	54	52	63.
F	Exe-	Mechanical cution.	09	12	50	51	45	55	10	53	62	57	59	51	63
,,'apo	οΝ "	Spelling of "Waste," "Sail."	69	000	#6 83	61	22	65	83	69	92	71	75	75	89 20
	1	". Whose."	42	43	200	45	100	08	33	7.5	33	67	51	62	78 100
	SPELLING OF	"Scholar."	58	100	48	50	0	40	29	25	67	33	† 9	69	97 44 100
	SPEL	", пурісь, "	42	71	200	65	0	40	67	75	83	20	63	652	100
SENTENCES		Spelling.	39	56	. 59	46	30	55	63	45	7.5	22	54	68	849
SE		Punctuation	23		757	40	20	30	20	75	71	75	54	46	67
		Capitals.	81	61	68	74	98	69	91	98	95	95	8	91	86 57
		Penmanship	43	20		48	30	46	47	55	56	53	20	555	20 20 50
	oitomi	Mental Ariti	67	51	2 27	55	20	27	97	50	98	58	70	78	96
,m.	Colum	Addition in	25	57	202	48	100	08	0	20	83	20	61	524	67
	Zumber of Pupils.		12	2 %	3 cg	22	-	70	က	4	9	9	114	13	101
91	Av'ge Age of the Pupils		Yr. Mo.	101	9-11	9-5	9-2	9-3	6-6	10-5	6-6	10-3	6-6	9-8 9-9	10-1 10-1 9-5
q pà	Schools, designated by Figures.			.) o	o 4₁	70	.0		∞ .		10	11		H 67 a	9 4 1 2
g pà	einne	Towns, des	A.											jej .	

64.4 60 64.2	61.4	85.3 85.3 76 76 87.8 87.8	82.1	67.3	64.3	72.3 84.3 69.3 49 48.1 69.5 56.2	89
62	54	80 81 86 84 84	85	55	92	25. 25. 26. 27.	71
43	43	82 84 84 84	33	48	20	76 82 10 65	29
64	75	89 85 81 81 81	85	60	<u></u>	81 83 57 74	22
55	55.	07 247 88 88 88	78	09	65	69 83 71	89
66 56 48	57	90 77 73 73 73 73	62	56	55	65 65 65 68 68 68	65
59 54 46	54	628 628 648 648 648 648	74	58	22	65 72 64 64 41 41	55
73 57 40	59	88 61 81 81 81	\$5 75	54 46	53	67 70 70 66 69 64 44	89
76 65 87	711	86 93 65 91	89	63	70	62 75 75 63 63	29
80 80 80 80 80 80 80 80 80 80 80 80 80 8	54	87 100 100 60 100 100	95	55	54	78 100 50 50 88 88 74	92
98 62 88 83 83 84	67	80 89 79 100 100 93	85	93	56	52 100 25 75 88 47	99
43 40 83	65	87 100 94 60 89 100	56	7.3	7.5	93 67 67 50 88 88 88 74	84
57 40 65	59	888888 98888 98888 98888	91	65 28	09	47 75 70 83 60 60 72 60 73	67
50 50 58	20	88 88 88 88	95	73	29	869 869 839 839	92
96 97 90	87	100 100 100 100 100	100	96	95	97 100 100 43 77 96	95
49 50 50	51	07 47 47 47 60 66	73	988	22	66 74 56 61 55 50 60	3
888	83	79 88 88 92 54	7.9	83	82	73 90 43 61 83 83	67
71 40 50	61	80 80 70 40 48 48	54	75	65	100 100 50 50 50 20 20	49
637	69	31 10 34 5 5 9	116	40	46	27 11 10 88 10	83
9-10 9-5 9-11	9-10	9-4 10-1 9-6 9-7 9-4	2-6	10-1	10-1	10-0 9-11 10-1 9-11 9-6 9-6	9-10
01-0		100400		1 2		1004007	
		ပံ		D.		ह्यं E	

* For want of time letters were not written in these schools at the time of the examinations. The percentages here given are based upon before written December, 1879, and bence are not considered in the average of the schools or the town; if considered, they would increase the average of the town about two per cent.

Tabular Report of Examinations of Children, Etc. - Continued.

	3]8'	toT egstevA	61.9 47.6 46.4	55.2	60.5	51.5	54.8	57.1 81.8	46.2	53.3	39.2 77.7 30.5 50.9
		Average.	60 36 47	20	53		35 47	41	44	45	38 61 28 51
rer.	ress,	Date, Add &c.	59 34 48	49	50	511	40	37	43	43	35 43 25 46
LETTER	-опп	Spelling, I	62 45 46	54	53	200	45	47	41	47	41 67 39 64
	Ex-	Thought and pression,	59 30 46	48	55	22	40	40	48	45	38. 73 19 43
		А у ега Ве.	44 41 59	45	61	47.	22	71	70	70	64 80 45 60
READING.		Expression.	46 40 55	45	58	92	60	28	65	659	62 34 62
H	Exe-	Mechanical cution.	42 41 62	45	88	223	75	67.5	75	77	66 89 56 58
, yek, '',	οπ "	Spelling of "Yaste," "Sail."	87 65 58	92	68	47	99	00 00 00 00 00 00		29	30 100 25 65
	OF-	". Whose."	85 15 50	58	43 60	200	98	020	60	43	40 50 0 40
	SPELLING O	". Scholar."	77 45 50	63	443	<u> </u>	14	58	600	31	00000
, m	SPE	".doldW."	68 54 50	61	100	87	78	280	67	7.5	80 100 80 60
SENTENCES		Spelling.	70 46 37	58	63	40		65	43	57	38 70 34 55
S	•1	Punctuation	36 4	30	68	0	34	90	0	21	87 0 0 20
,		Capitals.	75 56 45	65	75	49	47	63	98	54	51 100 31 71
	•	Penmanship	54 49 43	51	44	46	94 00 00	48 35	37	47	39 47 47 50
	hmette	Mental Arit	98	83	100	55	80	87 50	20	22	855 850 80
·m	Colum	ni noiiibbA	55 69 50	59	29		41	67	0	44	100 100 0
	Pupila	Number of	133	41	13.7	000	° 83 ;	27	တ	74	ص تن بی ص
		Av'ge Age o	Yr. Mo. 9-11 9-10 9-9	9-11	10-5	9-7	9-0	10-0	10-3	9-10	9-10 9-11 10-0 10-0
d by	elgnate	Schools, des			10	භ -	н ro c	9 1-	ω		1004
£q 1	bətany	Towns, desi	Fi		Ŀ						Ħ

39.9 39.4 29.9 33.1	40	63.3 48.2 36.2	56.1	66.6 33.8 16.1 34.4	68.8 52.3 27.7	52.1	42.1 41.4 36.8 43.2 55.8 44.4 28.6 50.2
63 19 32 32	39	61 35 29	55	63 0 32 32	72 44 27	45	36 26 33 15 30
. 555 834 80 80	35	93 18	53	56 0 30	75 40 31	45	35 26 37 12 30
65 34 13 27	43	30 33 55	55	59 17 0 50	56 49 16	45	39 38 38 34
70 41 23 88 88	39	68 40 29	59	110	& 4 8	51	34 24 23 15 27
955 46	53	68 57 43	64	63 14 52 52	67 50 50	99	53 68 68 68 68 68 68 68 68 68
53 33 34	48	3 5 8 3 5 8	55	68 60 41 50	60 52 55	65	7.44 6.00 6.20 6.20 6.20 6.20 6.20 6.20 6.20
77 31 58	57	78 56 53	72	76 66 53 53	74 66 62	20	61 61 53 54 57 56 74 49 49
50 60 67 25	47	81 50 33	20	25 25 50	100 67 54	61	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
0 4 6 0	27	75 0 33	59	33 0 33 0	20 20 20	31	05 00 00 00 00 00 00 00 00 00 00 00 00 0
0800	14	33 0 83 83	27.	88.00	0000	88	27 130 80 01 131 132 133
0 4 6 0	55	69 100 83	89	8889	100	69	650 644 667 660 660 672 673 674 675 675 675 675 675 675 675 675 675 675
0 80 25 25	39	62 67	59	64 36 40 40	70 67 35	54	74 45 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
250	13	19 0 17	16	8000	155.	55	0 9 0 0 8 8 0 1 0 1 0 1 0 1 0 0 1 0 0 0 0 0
0 38 50	45	84 71 76	81	90 54 0	86 57 17	67	25 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
57 36 40 30	43	49 50 40	48	30 052 33 052	8	41	14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
0 74 57 55	09	81 87 30	75	89 44 3	100	29	04 61 62 23 23 25 64 64 65 65 65 65 65 65 65 65 65 65 65 65 65
0000	14	80 80	83	89 gg	, 02 th o	46	73 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
ा किल्ल का	50	16	25	28	101000	55	25 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
9-9 9-8 10-1 10-3	9-11	9-10 10-1 9-9	9-10	9-6 9-6 9-9	9-3	9-5	9-9 9-10 9-11 10-3 10-3 9-6 10-3 9-7
2002		H 03 00		-01 co 4	1007		H C1 00 4 10 00 1 ∞
		i		J.			ᅜ

Tabular Report of Examinations of Children, Etc. — Continued.

	sjs.	доТ эзвтэчА	65.2 79.3	61.3	72.6	69	64.6 22.2.4 24.2.9 27.9 27.9 26.6 44.3 86.6 86.6 86.8
		Average.	52	66 48	81 75	63	63 455 25 25 25 25 25 25 25 25 25 25 25 25 2
ER.	Date, Address, &c.		53 76	71	83	65	65 40 65 65 65 65 65 65 65 65 65 65 65 65 65
Letter.	,nuc-	Spelling, I tration, &c	56	56	63	65	25 42 25 10 10 10 10 10 10 10 10 10 10 10 10 10
	I Ex-	Thought and	47	20 00	88	83	24 24 25 88 88 88 88 88 88 88 88 88 88 88 88 88
		Average.	68	65	889	89	25 25 25 25 25 25 25 25 25 25 25 25 25 2
READING.		Expression.	64	63 68 68	61 58	64	78 77 70 77 70 71 71 83 83 83 83 83 83 83 83 83 83 84 85 85 85 86 86 86 86 86 86 86 86 86 86 86 86 86
- E	Exe-	Mechanical cution.	72	67	75	72	25 25 25 25 25 25 25 25 25 25 25 25 25 2
оде'"	οΝ' " ΘΝ "	Spelling of "Waste," "Sail."	75	20 30 30	100 87	92	65 65 67 67 68 63 63 64 65 65 65 65 65 65 65 65 65 65 65 65 65
	Ţ	" Myose",	45		833	47	2000 600 600 600 600 600 600 600 600 600
	SPELLING OF	". Scholar."	70	000	100 83	69	100 100 100 100 100 100 100 100 100 100
, i	SPEI	". Which."	75	83	100	87	40 40 40 40 40 40 40 40 40 40 40 40 40 4
SENTENCES		Spelling.	88	57	84	8	05 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
SE	•1	Punctuation	53	958	82 58	65	33 44 46 46 46 46 46
		Capitals.	83 96	98 06	98 88	87	52 52 53 55 55 55 55 55 55 55 55 55 55 55 55
		Peninanship	57 66	50	58	56	40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
.0	pmetic	Mental Arit	93	88 97	90	92	888 882 882 883 884 886 886 887 71 71
•ш	Сојпи	ni aohibbA	25.	20	14	22	27 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Zumber of Pupils.			က က	7	46	000 000 11 4 4 17 0 0 138
	Av*ge Age of the Pupils' WioseWork is reported.			9-11	9-2	8-6	9-11 10-2 10-2 10-2 10-2 10-3 10-9 10-9 10-9
sq pa	Schools, designated by Figures.			භ 4 1	ರ ಎ		H0100450P000.
kq p	Towns, designated by Letters.						M.

44.3 39.7 41.4 40.4 34.3	41.8	52.7 47. 38.7 68.2 40.3 59.5 47.9	51.2	73 69.1 69.1 69.1 88.8 88.8 86.7 69.7 69.7 69.7 68.1	62.6
31 26 45 45	53	46 45 73 27 67 51	20	25 50 50 50 50 50 50 50 50 50 50 50 50 50	61
28 17 21 35	25	88 44 55 55 55 45	48	66 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	57
0 0 0 0 0 0 0 0 0 0 0 0	31	4 48 4 50 50 4 65 8 46	47	75 50 50 50 50 50 50 50 50 50 50 70 70 70	20
83.3 45.1 45.1	<u>25</u>	56 49 75 73 54	56	87 61 61 62 62 64 64 74 74 74 74 63 63 63 63 63 63 64 64 64 64 64 64 64 64 64 64 64 64 64	67
62654	58	62 64 65 65 65 65 65 65 65 65 65 65 65 65 65	64	71 68 72 70 70 70 64 64 64 63 63 63 63 63	99
57 57 52 53	99	69 25 62 63	61	71 68 66 66 56 70 61 61 61 57 59 59 58	65
56 63 61	59	71 71 70 70	67	70 68 68 74 74 74 77 67 67 67 67 67 67	69
63 63 45 65	55	04 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	57	7.5 69 69 69 7.5 66 65 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.	65
62 50 100 0	40	55 40 100 0 50 64	40	7177 7177 7177 7177 7177 7177 7177 717	99
48 0 50 100 40	46	86050508	22	0.8448000000000000000000000000000000000	49
95 0 100 60	73	33 4 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	47	100 100 100 100 100 100 100 100 100 100	92
44 255 70 48 48	45	0.00 4 4 0.00 4 10 0.00 10 0.0	20	7.00 6.00 6.00 6.00 6.00 7.00 6.00 6.00	99
1335	17	14 10 10 00 00 00	1-	65 447 10 10 10 10 10 10 10 10 10 10 10 10 10	20
21 21 21 34 34 34	39	855 8 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	53	83 77 77 77 73 73 80 80 83 83 83 78 78 78 78 78 78 78 78 78 78 78 78 78	78
8 2 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	27	45 89 80 60 60 60 40 60 40 40 40 40 40 40 40 40 40 40 40 40 40	48	61 61 61 61 61 61 61 61 61 61 61 61 61 6	19
75 80 54 0 0 54	65	88 67 72 92 85 85	80	887 872 873 874 874 874 874 874 874 874 874 874 874	£
00 00 00 00 00	51	50 50 50 50 50 18	40	655 67 67 67 67 67 67 67 67 67 67 67	42
10 10 21 22	68	00044411	45	25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	190
9-9 10-5 9-10 9-5 9-5	0-0	9-6 9-10 9-9 9-5 9-7 10-0 9-11	6-6	9-7 9-5 9-9 9-6 9-8 9-10 9-6 9-9 9-6 9-9 9-6	8-6
<u> </u>		1010047007			
ż		Ö		स	

Tabular Report of Examinations of Children, Etc. - Continued.

	.els.	Average To	31.2 46.3 60.2 61.3 54.9 59.3 44	49.3	64.9 52.8 44.8 60.3	58.2 61.3 55.1 65.2 59.5
Lerrer.		Average,	15 33 63 73 63 13	48	64 50 37 58	59 48 72 72 59
	r.eaa,	Date, Add	41 42 70 70 70 11	53	69 60 27 61	59 47 43 78 58
LET	-oun _c	Spelling, I	22 33 71 61 61 25 25 17	46	51 33 47 48	56 53 54 67 59
	rz-	Thought and pression.	23 62 78 10 10	46	72 58 36 64	62 55 47 70 60
		Avetage.	44 66 66 66 66 66 66 66 64 64 64 64 64 6	57	57 611	67 69 59 66 66
READING.		Expression,	44 62 62 62 62 63 62 63 62 63 64 64 64 64	54	56	62 53 53 62 62
	Eze-	Mechanical cution.	443 75 70 60 60 51 40	09	66 66	71 70 68 65 65
	Spelling of "Week," "Yaste," "Rode," "Sail."		83 83 83 45 45	71	81 55 73 73	55 57 57 50 50
	OF-	", ssodW"	70 69 87. 65 63 20	89	41 0 20 31	37 50 50 60 60 46
	SPELLING O	"Scholar,"	30 31 457 457 00 00	98	27 20 40 28	15 22 22 50 24 24
s,	SPE	".rbich."	40 46 50 75 100 37	53	64 40 20 53	100 89 90 83 83
SENTENCES.		Spelling.	36 63 69 69 57 47 36	57	56 44 48 48 53	50 74 61 71 59
	•t	Punctuatio	11 20 20 8 10 0	18	70 15 5 51	40 22 35 40
		Capitals.	37 46 70 59 59 56 23	54	82 57 57 74	74 91 72 97 80
	•6	Penmanshil	0440 07364 8368 04	46	50 37 41	44 59 59 61 62
	pitemd	Mental Arit	58 64 75 30 80 60 14	64	1 12 12	57 88 82 68 85 76
·ut	Addition in Column.		0232120	233	60 60	833. 50 111 60 87
*5	Pupile	Zumber of	0000000 000 000 000 000 000 000 000 00	- 62	35 55	27 8 9 10 10
- 11		Andrew Mork	Yr. Mo. 9-9 9-9 9-6 9-7 9-8 9-6 9-6	9-8	9-11 10-3 9-6 9-11	9-7 9-9 9-7 9-0 9-8
sq pà	etragle	Schools, des	H033470070		c1 co	⊢c3 co 4.
q pà	etanagl	Towns, des	Ċ		ಣೆ	Š

73 9 50.8 60.6 60.6 65.4 66.2 66.2 51.8 51.3	61.3	61.1 58.8 59.6 65.7	60.8	52.1 50.7 47.7 53.1	51.6
74 45 66 62 73 71 61 61 61 62 61	62	47 58 65	20	43 45 20 57	44
77 70 60 87 87 71 71 71 71 71 71 71 71 71 71 71 71 71	63	63 83 63	53	41 43 21 66	47
448 57 66 66 53 53 53 53	50	57 56 58	57	45 61 20 58	40
24 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	63	43 60 75	57	48 48 48	37
64 555 772 772 677 66 66 59	65	77 70 70 71	72	77 66 55 56	64
60 53 77 68 65 65 67 77	61	71 67 73 66	69	52 52 53 53	59
78 55 57 76 74 69 69 68	89	77 75 67 76	7.5	78 70 74 59	89
72 68 83 55 71 71 59	62	72 72 82 82	74	63 67 70 58	63
81 20 60 60 60 75 75 75 75 75 75 75 75 75 75 75 75 75	56	488 443	50	50 50 50 50	51
250 250 250 250 250 250 250 250 250 250	45	21 6 56 24	25	75 80 100 86	98
100 87 100 100 100 88 86 86	83	69 75 88 67	74	75 60 83 29	45
74 64 63 77 77 56 40 62 49	09	57 52 57 64	57	55 67 66 42	55
71 20 60 60 60 12 12 12 12 12 12 12 13	45	33 54 20 20	39	43 29 15	19
81 61 77 77 77 40 67 67	69	70 62 74 73	69	68 50 60 60	59
000000000000000000000000000000000000000	54	52 52 52 60	55	55 62 47 48	55
95 81 75 83 57 86 78 91 84	84	82 61 89	78	63 32 44 60	51
71 50 74 74 74 74 74 74 83 83	51	38 38 60 62	47	08 80 80 80	09
21 15 15 15 16 16 17 17	118	39 32 25 21	117	4 6 5 10	25
9-9 9-10 9-11 9-2 9-2 9-7	9-8	9-4 9-7 9-9 9-10	2-6	9-11 9-2 10-1 9-5	2-6
1018450780		H01004		H01004	
H		ŭ.		>	

* Could neither write nor print. Not included in making up the average of the town.

Tabular Report of Examinations of Children, Etc. -- Concluded.

	tals.	oT sgrifyA	48 56 56.4 41.4 37.8	48.3	24.3 41.8 30.8 26.4 53.3 46.8	32.4
		Ауегаде.	444 444 455 10	38	8 46 38 22 53 53	31
PER.	qress,	Date, Ado	44 48 49 10 10	40	11 64 45 27 45 52	37
Lerrer.	Cume-	Spelling, I	46 45 10 10	38	9 46 32 50 50 63	30
	q Ex-	Thought an pression.	35 45 10 10	36	29 37 12 65 45	56
		Average.	68 78 78 63 64	20	. 44 48 37 49 55	45
READING		Expression.	64 74 80 58 70	89	36 46 55 55	88
1	Exe-	Mechanical cution.	72 82 76 68 57	72	52 50 43 51 54 67	20
,,,98 6,1,	pou "	Spelling of " Vasie, " Sail.",	71 75 87 69 41	67	43 63 37 42 75	45
	SPELLING OF	", 9sodV "	45 69 100 50 67	59	43 75 67 67 100 100	99
		"з ероцэг,	85 25 25 33	44	43 33 0 0	38
ES.		". doidW "	85 54 100 75 78	75	29 0 67 33 0 100	43
SENTENCES.		Spelling.	55 7 55 4 55 5 5 8	55	34 37 41 30 50 65	39
		Punctuation	87.53 87.23 87.23 87.23	18	8 to 8000	9
		Capitals.	37 36 93 6	41	25 32 10 24 29 57	56
		Penmanship	36 31 50 41 32	35	31 38 16 27 45 55	20
	nnette	Mental Ariti	75 86 52 38 38	99	46 72 66 33 70 65	58
·u	Colum	nt notitibbA	25 79 0 0 56	43	0 0 0 100 0	4
	•s[jdn]	Zumber of	20 14 10 10 10	49	P40010	26
		Av'ge Ageof	xr. Mo. 9-7 9-7 10-3 9-10 9-6	2-6	9-10 9-8 9-6 10-1 10-0 9-5	8-6
f pà	gnated	Schools, desi Figures.	-01 to 4 ro		H C1 20 4 10 0	
pž	pəteng	Towns, designaters.	≱		×	

	۰
75	
Ψ.	_
	2
	ŝ
*	
	i
-	í
TOWNS	١
•	į
-	
-	
	i
100	
Hei	
	ì
THE	
Sec. 1	
0	
	2
-	•
1-	
FOR	
7	į
ы	į
	ì
_	2
VERACES	i
-	į
-	
1-	1
ь.	
	į

	59.7	61.4	82.1	64.3	89	55.2	53.3	40	56.1	52.1	40.5	69	42.8	41.8	51.2	62.6	49.3	60.3	59.5	61.3	8.09	51.6	48.3	32.4
	55	1-9	85	56	71.	50	45	30	55	45	30	63	35	50	20	61	48	58	59	62	99	44	38	31
	19	43	83	50	67	40	43		53	45	30	65	63	25	48	22	53	61	58	63	53	47	40	37
	56	1 9	85	53	22	54	47	43	55	45	34	69	35	31	47	59	46	48	59	50	22	49	တ္	30
	50	55	78	65	89	. 48	45	33	59	51	27	63	38	32	56	67	46	79	09	63	57	37	36	56
	56	29	62	55	65	45	20	55	19	99	53	89	52	58	19	99	22	58	99	65	75	1 9	20	45
	54	54	7.7	29	55	45	65	48	55	62	48	1 9	45	56	61	65	54	56	65	61	69	50	68	30
	50	50	84	53	89	45	22	22	75	20	29	22	59	59	29	69	09	09	69	68	75	68	23	20
	75	71	68	20	67	92	29	47	202	61	48	92	45	55	57	65	71	73	<u> </u>	65	74	63	67	45
	19	19	95	54	92	58	43	22	59	31	47	47	37	49	49	99	89	31	46	26	20	51	59	99
	54	29	85	56	09	63	31	14	22	33	22	69	† 6	46	22	49	96	28	57	45	25	98	44	 လ
	63	65	6	25	8.1	61	75	55	89	99	50	87	49	2	47	92	33	53	33	833	74	45	13.	43
	54	55	91	09	29	58	22	39	59	54	44	69	45	45	20	99	29	53	20	09	22	55	55	30
	5.1	20	95	29	92	08 .	21	133	16	25	10	65	54	17	1-	20	18	51	40	45	30	19	18	9
	85	87	100	6 6	95	65	54	전	81	67	47	87	55	30	53	78	54	7.4	80	69	09	55	41	56
	20	51	23	22	63	51	47	43	48	41	SS	56	15°	27	48	54	46	47	55	54	55	25	35	50
	20	83	62	<u>27</u>	67	જુ જુ	67	09	75	67	1 9	99	7.1	65	08	85	64	22	92	84	282	51	99	58
	61	61	10	65	49	50	44	14	33	46	33	22	35	51	40	45	233	09	. 37	51	47	09	43	4
	114	69	116	46	83	41	14	50	55	55	100	46	85	30	45	190	62	65	54	118	117	25	49	- 56
	6-6	9-10	9-7					9-11		9-5	9-10	9-8	9-11	6-6	6-6	8-6	9-8	9-11	8-6	9-8	9-7	9-7	0-7	8-6
No. of	11	00	9	27	7	က	00	00	က	1	00	9	6	20	<u></u>	133	00	4	က	C	4	4	ಬ	ဗ
	A.	B.	ပ	D.	闰	드	ප්	H.	н	J.	Κ.	L.	M.	ż	0	Ъ.	ċ	2	က်	T.	j.		```	×

AVERAGES FOR THE COUNTY.*

1 1	1
29	work.
52.6	did the
51.7	ctually
52.6), who actually did th
53.5	f years)
66 57.9 62 53.5 53.6 51.7 52.6 57	nd a bal
57.9	d ten ar
99	half ar
65.5	n each branch is the average of the pupils within grade (between eight and a half and ten and a half years
54.2	ween ei
44.8	de (bet
 69.2	thin gr
58.1	upils w
40.1	of the p
69	verage
1,650 46 73.9 49.6 69 40.1 58.1 69.2 44.8 54.9 65.5	is the
73.9	branch
46	in cael
1,650	counts
154 9-8 1	ge of th
154	ne averag
	* TI



TABLES OF AVERAGES FOR GRAMMAR GRADE.

EXPLANATION OF TABLE D.

THE letters of the alphabet designate the towns, and indicate the order in which they were visited.

The numerals designate the schools, with the order in which they were examined.

The numbers expressed in the columns denote the percentages of correct answers given by the pupils reported.

The blank spaces indicate that the pupils were not examined upon items expressed in columns where the spaces occur.

The letter L, in the column marked "Silent Reading," denotes that the pupils of the school wrote a letter, instead of the narrative.

Note. — The total average for each school was made up from the percentages in the branches in which that school was examined.

In making up the total average for the town, when the examination of a school in any branch was omitted, the school was allowed the percentage of the other schools of the town in that branch. In making up the total average for the county, the same plan was pursued.

Table D. — Report of Examinations of Children between Twelve and a half and Fifteen and a half Years of Age who have attended School on an Average Eight Years.

Percentages of Schools and Towns.

	.el	atoT 92 gri9 vA	57.8 46.5 54	50.5 35.3	43 63.8	54.8 45	52.6	58.8 61.8 61.8 62.5 7.2 39.4 39.4	55.4
	-sib a	SpellingWord tated.	74	0000	58	65	89	60 657 677 67 67 60 60 80	64
		Average.	53 47	47	49	57 62	55	250 250 250 250 250 250 250 250 250 250	09
		Spelling.	67 47 60	55 18	88	63	59	88 171 172 88 88 89 89 89 89	65
	TIVE.	Capitals and Punctuation.	36 48 64 64	55	25	46	40	65 47 47 66 66 778 78	26
AGE.	NARRATIVE.	Penmanship.	57 48 49	15	33	48	55	86 86 86 86 86 86 86 86 86 86 86 86 86 8	53
LANGUAGE		Written Ez- pression,	69 67 56	59	38	68	09	446 77 77 77 69 61 62 62	20
		Silent Read- ing.	65 L	30	ట్ట్ర బ్లా బ్లా	59	.48	16 67 17 17 17 17 17 17 17	56
	NG.	Average.	65	000000000000000000000000000000000000000	61	89	89	65 69 69 72 73 73 60 60 60 74 75 75 75 75 75 75 75 75 75 75 75 75 75	65
	ORAL READING	Expression.	68 65 74	:38	28	64	29	464 69 70 70 70 70 70 70 70 70 70 70	19
	ORAJ	Mechanical Execution.	68 65 75	57	79	7.1	89	66 45 69 74 74 74 50	99
) Ez-	Short Process	000	000	00	00	ा	16 30 33 33 30 30 30 30 30 30 30 30 30 30	16
		Ачетаве.	59 31 47	£ 5.	33 33	45 19	64	848 855 855 855 855 855 855 855 855 855	43
ETIC.	4.	Measure- ment.	000	· 0	0 00	21 0	ော	30.00 30.00 14 00 00 00	19
ARITHMETIC	EXAMPLES.	Simple In- terest.	61 0	150	20 20	0 0	30	320 320 321 00 00 00 00	38
	S. EX	Multiplica- tion and Di- vision.	67 65	120	2 2 2 2	64 75	99	50 67 67 67 67 67 67 67 67 67	65
	i	Addition in Column.	78	55	100	64	29	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	49
	.sliqu	T to redmuZ	81 4.75	20° 60°	10 C1	- 14 - 15 - 15	103	25 10 10 10 13 13 6	66
		Average Age	Yr. Mo.	13-5	13-5	13-6	13-7	14-4 13-7 18-6 13-6 13-10 13-1 13-5 13-5	13-0
		Schools.	C1 01	410	20	တတ		1010040.00L00	
		.suwoT	A.					щ	

73.6 77.1 79.4 74.8 75.9 78.7	77.2	61.6	58.3	61.5 68.1 46.4 42.6	61.6	53	68.8 32.7 42.8 57.8 49.8 37.1
75 73 75 75	2.2	67	64	68 80 47 60	70	7.1	75 46 48 48
81 86 79 80 80 82	85	58	55	65 67 48 49	64	47	66 28 49 64 60 40 40
91 84 84 89 89 89	89	65	63	82 51 51	7.0	56	76 20 20 443 67 67 66 86 86
85 90 74 85 78	88	45	43	50 66 43 37	59	43	59 14 38 44 65 40 40
85 188 188 788 788 788 788	6 <u>8</u>	54 26	51	. 53 48 53 53	54	43	49 33 59 40 36 46
98888888888888888888888888888888888888	88	99	<u>7</u> 9	74 73 48 55	71	49	73 37 75 76 69 46
60 77 73 73 73 72	20	52	ວ້ວ	58 48 L	57	45	73 34 75 1 1 1 1 1 1
82 77 83 77 80 77	7.0	69	67	25 23 23 25 26 26 26 26 26 26 26 26 26 26 26 26 26	11	65	77 58 70 63 65 69 69
883 725 730 741 741	78	67	65	69 69 50 50	67	64	73 64 63 63 65
83 83 74 81 77	08 .	71 55	69	75 77 62	75	65	81 62 76 69 67 69 72
111 333 0 38 30 30	53	49 0	44	113	15	96	21 0 0 0 0 0 0 0 0
60 60 60 75 75	70	62	57	50 64 831 95	65	20	67 253 253 10 40 40
39 26 38 38 52	45	111	10	33 0 0 0	41	0	33 10 10 11
61 72 72 75 70	99	64 0	57	36 55 0 0	41	45	20 20 20 20 20 20 20 20
725 725 88 88 96	98	33	81	73 60 25 67	53	84	90 82 82 82 82 82 82 82 82 82
67 75 75 88 83	85	33.55	80	58 70 50 33	99	74	833 440 644 40 40 56
18 9 4 8 8 23	87	533	59	88 0 4 s	8	31	25 8 10 10 20 20 8 93
14-0 13-8 13-11 14-7 14-2	0-	-10	4	13-11 14-1 13-4 12-10	13-11	10	14-2 13-10 13-5 13-11 13-11 13-11
400444	14-0	14-5	1.1-4	목적당	13-	13-5	
		-101		C1 to 4			
್		D.		편 .		F.	<u>ن</u> .

Report of Examinations of Children, Etc. — Continued.

	.el	stoT 92gcT9vA	43.3	48.0	44.2	27.9	91.9	61.3 47.3 37.1	50.8	54.9	46.8	40.1 59.8	48.4
	-sib al	Spelling Word	72	44		35	52	63	58	58	53	54	54
		Average.	50	55	28	41	55	54 48 43	49	20	£ 5	52	61
		Spelling.	54 75	57	- වේ	41	8 5	56 66 37	55	54	55	2000	33
	TIVE.	Capitals and Punctuation.	44	54	200	38	40	51 85 41	44	41	88	21 S	99
AGE.	NARRATIVE.	Penmanship.	55.55	5. 5. 5. 5.	900	37	40	. 44 43 43	44	53	₩. I	51 43	48
LANGUAGE.		Written Ex- pression.	53	56	5.84	47	61	61 49 52	55	55	49	56	25.
		Silent Read. ing.	47	7°	88	n-	7 12	57 44 L	52	47	<u></u>	 	55
	NG.	Average.	67.53	46	649	85 m	6 8	79 70 49	29	72	65	 00 00 00 00 00	77
	L READING.	Expression.	70	40	58	33 33	56	79 64 41	63	99	50 50 50	<u> </u>	65
	ORAL	Mechanical Execution.	77	12 8	69	43	3 89	79 76 57	11	77	75	05 74	92
	1	Short Process	00	00	0	00	0	000	0	က	0) (2) (3) (4)	0
		Average.	32	46	25	<u></u> ∞ ε	38	61 35 25	43	52	66 1	50	20
ETIC.	4	Measure- ment.	13	0 6	0,0	00	9	60 0	G	29	0	0	0
Авітнметіс	EXAMPLES.	Simple In- terest.	25 60	67	30	333	47	77 40 29	55	29	55) (i	6
	S. EX	Multiplica- tion and Di- vision.	880	67	67	0 2	20	89 40 29	57	7.0	200	100	45
	i	Addition in Column.	202	20	3 83	0 5	65	56 60 43	53	-17	200	78	27
	eliqu.	Z to redmnZ	ထည	တ ည	ာ က	ကဗ	38	9	21	42	ဗ	n 01	11
		А vетяge Аge	Yr. Mo. 13-11 13-8	14-2	13-7	13-1	14-0	13-2 14-3 14-5	13-10	14-0	13-11	13-11	13-5
		Schools,	- 63	က <	H 70	10	-	- C1 c0		7	C) c	о 4 1	20
-		томъв.	H.					I.		J.			

41.7	51.5	50 44.7 31.4 36.6 48.5 47.9 46.9	47.8	58.8 68.5 47.9 60.4 52 45.5	54.3 52.8 52.8 57. 57. 57. 52.8 57. 53.1 47.4
60	57	69 53 40 50 50 68	59	71 63 69 60 60 60	55 55 55 55 55 55 55 55 55 55 55 55 55
43	50	47 55 41 46 31 47 52 64	47.	66 66 46 46 39	50 53 63 80 80 87 77 87 74 10 10 10 10 10 10 10 10 10 10 10 10 10
53	57	45 59 48 37 27 51 49 60	48	61 60 54 49 46	55 75 75 75 75 83 83 83 16 16 16 83 83 83 83 83 83 83 83 83 83 83 83 83
600	42	41 42 30 39 26 37 59 66	40	69 75 45 80 30	44 68 68 68 68 68 68 68 68 68 68 68 68 68
48	49	45 48 88 48 80 45 74 54	43	61 62 42 48 32	45 38 38 38 34 38 38 38 45 7
51	22	63 63 63 62 62 62 62 74	55	73 65 50 50 48	96 65 65 71 71 83 83 83 84 13 65 14
86	47	48 64 11 12 11 11	48	65 L 40 40 38	48 67 11 11 11 12 15 67
66 71	20	73 69 71 72 70	7.1	70 81 75 69 73	76 88 88 88 60 60 60 60 60 60 60 60 60 60 60 60 60
99	64	71 61 65 67 67	29	62 80 80 70 67 71	60 51 51 51 60 60 60
72 76	92	74 77 77 73	75	78 82 82 71 71 75	77 78 82 67 67 50 50 50 71
00	2	115 0 0 0 0 0 13 0	œ	80 00 00 00 00	10 00000
98 98	43	38 34 15 15 25 25 25	35	42 67 50 66 48 37	20 20 20 20 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30
0 88	18	9 0 0 0 0 0 13 25	9	88 33 0 0 0.	25 25 0 0 0 0 0 0 16 16 16 16 16 16 16 16 16 16 16 16 16
0	76	26 15 13 0 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18	33 100 100 76 22 13	34 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 88	99	447 508 50 50 75 75	55	58 88 93 53	76 53 50 100 100 58
100	63	71 77 63 0 0 175 0 0 0	. 59	67 67 67 78 80 80	68 100 100 100 100 100 100 100 100 100 10
4	81	28 48 40 40 40 40 40 40 40 40 40 40 40 40 40	105	17 10 10 10 10 10	G C1
13-11	13-11	13-9 13-9 13-9 13-0 14-2 13-10 13-8	13-9	13-8 113-6 113-7 113-8 113-10	13-7 1-4-1 1-4-1 1-5-1 1-4-1 1-5-1 1-4-1 1
9	-	101004700F0		100400	10:04:00
		З		T.	M.

Report of Examinations of Children, Etc. — Continued.

		*8	Average Total	57.5 45.1 55.1	61.9	55	55.6 63.5 42.9 63.1 68.7	59.4	58.7 60 50.6 62
		ls dic-	Spelling Word	66 48 58	70	61	61 71 50	64	62 67 50 62
			Average.	57 47 54 37	53	54	55 62 61 54	58	56 60 51 61
			Spelling.	64 49 61 20	60	58	60 69 67 56	64	622
		NARRATIVE.	Capitals and Punctuation.	52444	50	48	43 49 62 64	49	47 49 39 52
	JAGE.	NARR/	Penmanship.	24 28 74 87	40 31	41	45 44 48 48	44	55 50 60 68
	LANGUAGE.		Written Ex- pression.	63	55.55	61	70 72 65 59	69	64 65 60 65 65
			Silent Read- ing.	25 L 52	וחח	09	56 75 L	65	55 61 30 60
		ING.	Ачегаде.	68 70 55	59	99	74 68 68 67 77	71	68 72 75 73
(aux		ORAL READING.	Expression.	20.00	22	61	74 61 63 59 72	29	62 72 69 69
20000		ORA	Mechanical Execution.	68 78 58	61	7.1	47 75 75 75 75 75 75 75 75 75 75 75 75 75	75	74 76 77
			Short Process ample 2.	11 0	25	6	27 0 0 0	6	0 0 0 4
			Average.	57 31 49 88	82.83	50	46 62 34 67 67	54	56 53 38 57
and	JETIC.	4.	Measure-	. 0000	0 0	7	0 0 0 0 0	15	15 24 0 8
3	ARITHMETIC	EXAMPLES.	Simple In- terest.	45 0 44 50	13	35	69 73 0 67 67	64	58 39 100 63
a roda		e;	Multiplica- tion and Di- vision.	89 75 94 100	38	83	69 73 67 67 100	73	81 74 50 83
		Ħ	Addition in Column.	95 50 50	100 75	75	46 73 67 67 100	64	71 74 0 75
		nb[]a•	Number of P	26 4 16	40	60	:: :::::::::::::::::::::::::::::::::::	33	41 46 2 24
			Average Age whoseWork is	Yr. Mo. 14-0 14-5 13-10	13-5	13-11	13-11 14-1 13-2 13-9 13-6	13-10	14-1 13-9 13-3 13-9
			Schools,	- ci w 4	1700		<u> </u>		H01004
			томпя.	Ż			·o		P.

57.8 60.5 62.5	09	38.6 38.8 46.7 56.2	43.3	57.8 37.5 45.1	51.2	48 60.5 51.8	51.5	72.3 64.4 66.9	68.8
68 63 61	65	61 61 62 63 63	57	69 54 50	09	71 70 46	67	77 27 20	73
56 62 68	59	000 000 000 000 000 000 000 000 000 00	38 41	15 85 44 15 91 85	48	49 65 58	5.1	76 69 69	73
8 8 8	99	26 44 46 59 50	45 4	67 27 66	22	25 24 25 25 25 25 25 25 25 25 25 25 25 25 25	63	80 80 81	73
47 53 57	20	255 133 447	8 8	57 16 41	44	37 67 63	48	65 55	1 9
524 539	3	830 837 849	47 40 36	49 38 41	45	47 62 42	20	70 69 69	68
127	99	254 255 250 40 60 60 60 60 60 60 60 60 60 60 60 60 60	48	2242	49	55 68 60	53	. 83 71 67	92
42.02.4	09	30. 50 50 50 29	25 44	40 830 422	46	52 47 53	뎐	74 76 65	7.2
67 67 67	23	62 62 63 74 73	55	88	99	66 70 62	99	78	92
609	102	60 55 61 62 68	E E	55 55	99	888	69	29 20	73
323	73	66 77 76 78 78	21 71	73	7.5	69 77 65	202	75	7.0
బబ్బ	11	43 0 0 0 0 0	00 0	135 0 0	15	10	9	25 19 46	53
52.52	53	68 88 88 88 88 88 88 88 88 88 88 88 88 8	50 50 72 72	254 30 40	45	32 48 40	37	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	62
100	13	250000	0 4	25 0 0 0 0 0 0	900	9008	6	28 0 12	18
68 45 76	24	113 50 50 50 50	67 100 36	42 10 43	3.5	93.3.4 45.	eg G	58 62 81	65
122	92	63 42 57 100	100	50 50	61	48 .58 .36	48	75 77	78
58 78 65	71	38 42 45 61 100	0 0 49	800 62	56	52 100 45	3	91 76 85	98
19 40 17	189	71 18 18 18	69	24 10 7	41	31 12 0	55	53 21 26	100
14-1 13-11 13-10	13-11	13-7 13-8 13-6 13-7	13-0	14-2 13-11 13-9	14-0	14-2 14-6 13-9	14-2	14-3 14-6 14-3	11-4
402	1	10100410		c1 co		c1 c3		H 03 00	
		Ċ		ಣೆ		$\dot{\omega}$		ij	

Report of Examinations of Unildren, Etc. — Concluded.

		*S	fatoT 928879VA	65 63.3 69.9 66.4	6.99	68.5 69.5 46.5 60	59.8	52.9 51.2 61.5	55	75	53.8
	-	-sib el	Spelling Word tated,	70 79 80 65	73	86 54 58 68	69	63 70 78	69		52
			Average.	68 60 71 62	99	81 84 46 57	8	53 48 64	55	55	54
			Spelling.	76 63 83 61	73	80 25 80 85	22	55 58 78	61	75	63
		TIVE.	Capitals and Punctuation.	59 58 61 54	58	85 85 39 47	57	44 25 45	41	20	50
	JAGE.	NARRATIVE.	.qiilanamna97	258 258 258 258	55	61 70 46 51	53	61 55 60	59	55	48
maca	LANGUAGE.		Written Ex- pression.	73 80 70 70	73	81 87 59 60	67	66 56 72	65	85	69
- concidaca			Silent Read-	76 57 73 71	7.1	L 100 36 57	53	44 41 63	49	98	39
- 100c		ING.	.9ge19vA	773	75	72 76 65	69	555	74	50	69
C16, 42		DRAL READING.	Expression.	68 67 73 73	70	64 69 60	63	66 67 74	69	50 65	63
Onument,		ORA	Mechanical Execution.	78 79 81 83	80	88 27 70	75	77 82 82	79	50 77	7.4
2.		·EX-	Short Process ample 2.	16 77 25 13	16	8,80	21	0 0 23	6	0	0
L'acametre cons			Ачетаве.	56 59 63 67	61	50 50 45 60	53	40 40 47	43	100	47
acounte.	ARITHMETIC.	s. 4.	hleasure- ment.	16 14 29 58	30	20 0 0	5	3 11 9	7	100	38
3.	ARITH	EXAMPLES.	Simple In- terest.	61 86 58 63	65	20 100 60 88	63	22 37 43	32	100	49
religie		€ €	Multiplica- tion and Di- vision.	77 71 88 83	80	100 100 60 75	68	64 47 69	19	100	62
1		1.	Addition in Column.	71 64 75 63	69	100 0 60 75	74	583	89	100	38
		•s[[dn	Yumber of P	31 14 24 24	93	ರ್ಷಾಣ	19	2000	79	11	8
			Average Age	Yr. Mo. 14-2 13-11 13-10 14-2	14-1	13-11 13-1 13-7 13-8	13-8	13-6 14-2	13-8	13-5	13-7
			Schools.	⊣ 01∞4		_0004		H 01 m		-01	
			.апугоТ	u.		>		W.		×	

AVERAGES FOR THE TOWNS.

1																							
- 22	77.7	77.9	58.3	61.6	53	53.3	49.9	50.8	51.5	47.8	54.8	47.4	55	59.4	8	45.1	51.2	51.5	68.8	66.3	59.8	55	53.8
89	64	77	64	202	71	65	55	58	57	50	33	53	61	79	65	22	09	29	73	73	69	69	55
67	200	S 62	55	1 .9	47	56	55	49	50	47	50	46	51	58	59	41	48	54	73	99	09	55	54
, C	3 2	89	63	79	56	56	61	55	22	48	53	38	58	64	90	44	22	33	73	22	7.5	61	63
40	220	333	433	50	43	46	40	4 1	42	40	44	42	48	49	20	50	44	48	1.9	58	29	41	20
5	1 22	င္တင္တ	51	5.1	4:3	46	49	44	49	43	46	45	41	4-1	55	36	45	50	89	55	53	50	48
9	20	88	65	71	49	65	61	55	22	55	58	54	61	69	99	20	40	50	92	73	67	65	69
48	220	02	55	57	45	68	29	55	47	48	48	55	09	65	09	44	46	51	22	71	53	49	39
85	65	62	29	71	65	89	09	29	202	71	73	99	99	7	73	29	99	99	92	55	69	74	69
49	9	202	65	29	64	65	56	33	1-9	67	69	61	61	29	20	3	09	- - - - -	<u>-1</u>	20	65	69	33
89	99	08	69	75	65	<u> </u>	::3	7.1	92	5	22	77	71	75	75	71	7.5	202	7.0	08	75	62	74
0	9	20	44	15	96	10	0	0	ಸಾ	<u>∞</u>	 G	10	9	G	11	9	15	9	Si Si	16	21	9	0
49	433	202	22	55	20	40	38	43	43	35	20	30	58	54	53	37	45	37	62	61	53	45	47
60	10	45	10	41	0	11	9	C:	18	9	15	16	-1	15	<u> </u>	4	 06	o o	18	900	10	1~	
30	800	99	29	41	45	56	47	55	51	18	41	27		64	51	36	34	53	65	65	3	32	49
- 09	65.	98	81	65	8.1	29	26	.22	99	55	20	58	85	33	92	59	01	48	78	S	89	19	<u>වූ</u>
67	49	85	80	09	77	56	45	<u></u>	6:3	50	89	55	5	64	7.1	49	56	3	98	69	14	89	38
	00	87	50	8	31	93	96	21	81	105		65	09	33	681	69	41	55	001	93	19	70	∞
														_	_	_	_	_		_			
1		14-0	14-4	13-1	13-8	13-1	14-0	13-				-		_	_	_	_		14-4	14-1	13-8	13-8	13-7
No. of Schls.	- C	9	CI	4		9	~	ಲ	~	တ	9	_	9	<u>ت</u>	_	<u></u>	4	CJ	<u>می</u>	4	4	က	CJ
4	i er	i zi	D.	표	년	ج.	H.		J.	K.	ľ.	M.	ż	0	<u>ب</u>	ċ	æį	ķ	H.	Ċ.	· \	W.	×

AVERAGES FOR THE COUNTY.*

122 13-10 1,646 65.7 68.8 42.9 15.4 48.2 13 73.5 67.2 70.4 56.3 64 52.1 49.4 62.1 56.8 64.8 56.9	13 73.	5.4 48.2	8 42.9 1	65.7 68.8	$3-10 \mid 1,646 \mid$

The average of the county in each branch is the average of the pupils within grade (between twelve and a half and fifteen and a half years), who actually did the work.

Arrangement of the Towns according to their rank in the several branches in which the Schools were examined.

	TOTALS.	Per cent.	666.3 666.3
	TOT	.snwoT	
	ETIC.	Per cent.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
DE.	ARITHMETIC.	,snwoT	OHDOORYGIZEXEELHGGGM
PERCENTAGES IN GRAMMAR GRADE	LANGUAGE.	Per cent.	87
GRAMS	LANGI	.suwoI	OHPHPHPHPSSKKAHPSSAHFHA
AGES IN	SPELLING.	Per cent.	8377733 66577733 6657755 6657755 6657755 665755 665755 66575
RCENT	SPEL	.snwoT	ONHOPENER O A O EX GRANHILLE CA
PE	PENMANSHIP.	Per cent.	8886777777777 8886777777777777777777777
	PENMA	.snwoT	oH≱HDHHYAUWHHNGHHHOHMHYA
	READING.	Per cent.	7.75 7.75 7.75 7.73 7.73 7.73 7.73 7.73
	REAI	.вптоТ	OHDB: 10 E E E E E E E E E E E E E E E E E E
	TOTALS.	Тет септ.	823.1 668.668.668.668.668.668.668.668.668.668
	TOT	.snwoT	ひにまひむまはひむないいのようががはとばまれ
	METIC.	Per cent,	77477777777777777777777777777777777777
DE.	ARITHMETIC.	.snwoT	inakaho4pagoakhobkukkohi
PERCENTAGES IN PRIMARY GRADE	LANGUAGE.	Per cent.	82772 6633 6633 674 674 674 674 674 674 674 674 674 674
Primai	LANGI	,2птоТ	ORTHRARUGORPHERXR
GES IN	SPELLING.	тегсепт.	822233333333333333333333333333333333333
RCENTA	SPEL	.enwoT	OUREDUAROUGRAPHOREEN
PE	PENMANSHIP.	Per cent.	7.3 6.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7
	PENMA	,8пwоТ	ORUTOURINGUE 4HOORGHREN KA
	READING.	Percent.	01110000000000000000000000000000000000
	REAL	,suwoT	CUP CHURENE CAUENTEN

INDEX TO LITHOGRAPHS OF LETTERS, NARRATIVES, ETC.

Work of Primary	GRADE										P	AGE.
Arithmetic, Best and	Poore	st				•	•	•	•	•		201
Best of Letters .		٠.			•	•	•		•	•		202
Poorest of Letters												212
Average Letters of Hi	ghest	Two	Tow	ns		•		•		•	•	215
Average Letters of Lo	west '	Two	Tow	ns		•			•	•	•	218
Work of Grammar	GRAD	E.										
Arithmetic			•				•			•		220
Best of Narratives						•						226
Poorest of Narratives						•				•		234
Average Narratives of	High	est T	hree	Tow	ns	•						240
Average Narratives of	Lowe	est T	wo T	'owns	3							246



Primary work in Numbers. 201

\mathcal{S}	
Written.	Mental. Answers.
184 337 692 476 208 356. 575 993 888 4.709	21 72 42 45 81 56 56 15 8-3 50 ranges.
425 418 184 337	20 32 18

aronges

Dearmother, - Beached Sen Part Saturday n the afternoonat 3.o clock, It is a very pleasant it very much. Buish Frould stay longer. 202 But as you want me duill come home tace. It is a very good working place. Thise Lew, Jan. 1),1878.

come down to the depot we the shigh nest Wednesday and Enantyou to

mary Grade (Best/Age 10 prs.

204 15, 187.9.

Good-lye. Jours

Primary Grade / Best /

Dear Mother

I received your letter

and was glad to hear from you. I weigh 60 hounds I have a pleasent visit of any coming

sleigh or the carriage to the old bolony Depot From your loving daughter home Wednesoday. I want you to send the dend my love to all the folks

Primary Grade (Best) Age 10 yis.

ogan it played real mic. I sam a rue by last might setting a lig 208 I now sit down to write a morning and heard asplendid hare letter and say a few things which I wish to I wend up town this Lynne Mass. March !!- 1 879 Dear Father.

food we gave him someand he dog on a poor little britten there was west away twanty on to send a how and canage to the 9 yo amancame has legging for for me to come home in

209

Frmary Grade (Best) Age Yrs.8 m's

It has been eal good coasting here to day. 4mm/lan 21/1879 Or. Maltongar me a su Las Sather

Will you meet me at the orabhrustmas present. depot on Mednedday!

rimary. Grade / Best /

I MIN AND " XIM SOM " " ME HOWE AND HAVE MAHAR PEIT 1 COM THREE HONDREID BEIRZ My M. Dear Machen I had a meetime land my Galy hadra good time my father was seek Milichada

Primary Grade / Poor / Ages. 9 yrs. 7 mis., 9 yrs.

nae bown to linand got to take rol the born is harrested onles ere en in Lym And wat we how in coming turnic · mnss

Primary Grade / Poor / Ages. 9 yis. 9 yis

M. Near 19 mene so motor without to arrive made in my down interpo going ant dast a bounding find you have my my Bill another so go sutthe

been down here a long time, I will worne for Christmas, a pack of envelops and paper home soon, next It ednesday you will meet and a good many other things. As I have Shave had a nice book your diviere driend -Lynn, Jan. 15. 1878. me a the Old Cohy Railwad. My Dear Father, -

Primary-Grade / Av. / C. Age 9 yrs.

Jammann ynn. Jani21,1879 faither

Muly Sambonning homenestereday

yournitsend the sligh. Inshyran were here to. It us a very meeplase It rom your yearn't son

Primary Grade (Av.) E. Age Tris

I have had a lovely time at 6 kmetine downt you think I'm heaty righ 218 Ihad let of hum zent that I don't lynn feli, Ari/29 Hing I ban ling Hom know gear mother

mie you retorn to meet Time hear i am coming . Dear on orther how do you Do i am having a view Horme next meroday to

Primary Grade (Av.) N Age 9 yrs.

whe good by

Grammar Grade (Best.) 1. Age 14 vrs. 8 mis.

3+2+4+2+2+4= 16 ndo. anound field 6/2 6 92 2 dm 75-39 85.89 = 2 mor. 8.97 = 15 days. 215.86=14 38 # = 2. nd 88 ft = 2 in 584:2nd 834:2nd

Grammar Grade (Best) II. Age 13 yrs. 9 mis.

ne. 80, 4975 10=5669 9.3575 x 12= 3575 x 2= 5952 rown (fed. 20. to June 20= 4 ml home 20 to 4

no to
82113
1868-115 1868-115 18-0015
1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
200000000000000000000000000000000000000
Topias In
morana M

5-23 5-30 S, 5/2

The Lewin Innec.

him their judge whom was anything happened that their could not deade. On day his fallist asked him what he had asked him what he had asked him what he was punished bother, for deciding unjustly, "How so," said hie father. "Mel "ead lynes, their were two boys, on a small had a quat devil to immand and the other boys made boy and one a large by. The small by had a cost on that Cyrus, the persian frince, had many madre, who trud to tach him everything that was good. He was hawopt with a great many boys of his own age and eige. He was of a good die boution and humane lumber. Till he

was rouch too large for him, and a large loy who had a in wery hast. To the large boy decided that this should change coats which the small boy would not again to this as I was passing by they said that throught the judge of Leaid that as the enall coat fitted the emall boy coat that was much too enall for him and was too small better than the large one, I thought it was only right that master punished me saying that it was not the fitting of the wat that I should go by " And Dynus was very can-The emall boy should they the small coat stor which my ful attinuade not to judge inquelly.

who endeavoued to teach him all that inal yord bywe prince of Celea, had many masters evening his father asked him ythat he had been taught that day. He andwered other boye of his own age and had a very humane disposition. It was often noticed and regul, He was educated with several that he had been purished. Geing asked why he reflied, two boys, one a great and Anamedote of byuns, Crince of Persia, that he always wished to command and the other boys made him their king. One

much too large In him. The hanger boy videa him to exchange with him but the smaller boy the other a surrigine about a row are as Grammur Grade (Best) II. Age 13 yrs. which was too small for hish insureng way, and the small boy had a coal with mas changed by force. Saecided in favor by the Sarger when I should not because the smaller coat belonged to the smaller by and the lan-I was passing by I was called whom to de-cide for them. The greatby had a war did not mish to approximations the langer lay elgesto the great boy.

Ancodote of byrus.

there were two boys one of whom was large and the othersmall that he had been furnished because he had decided unfair byrus, with other boys of his own age was educated by masters by the father asked how it happened byrus amoreced that It chanced that the small boy had a cost which was much themselves know. One day byred was asked by his father who enderved to teach the boy's wary good thing which they what he had learned or done on that day; byrus replied

too large for him while the large by had one which was as much too small for him. The large by proposed that right and not in what way they would be most filly slothed. to decide for them. He decided that the large boy should Is bynu was paring just then the two bys asked him father. "Yel," said byout But I was asked to judge which was they should exchange coute but the other would not consent. Would they not be more filly clother in this way; asked the keep the large coat and the other by the small one Thus I decided unfairly and deserved prinishment.

had beinded unjustly, and being asked how that could be he said, "As I was going along the street I saw that by, one thing Eyme musa Persiun frience who had was right of the was brought up with other by a souther age. One day his father, when him what he had lawred and he very large with a small veat on and the said that he deserved to be provided as he The Ling very small with a large cont The large by wanted to exhange but the small by wonder not concernt, thereit the light of the small by from him by force, then the small by a fair that the large log. which me saying that but not to juide which will be juide whither the fundamental being the say had a right to take the boung on the same of the same should keep the lage contamithe small by the small voot; then my master pun-

Endeward to teached him one day has Jakiu asked what het had Then Was 2 Roys I hower Boat was Ato Lyg and the Lolly Loant and he seed he got a Tuking with out cury course Eyens the Prusian prince had many master who and the Indercoat, or old fet the Inell buy and Grammar Grade (Poor) I Age 14 Fis Gread the Bry Buy & Bast notdyth the Shooffel buy he went to dehort nathronan other of his worl dad The Mille Suns Loads Buys roat Was Bentunded Bhange Haggat a Pickenstollict the

Wonted me to decide the matter, and becorded and not as it ext of a feather of a low temper once doing he come home, and the forther asked him if that he had don to day he sear that he had yet a bekin for Descroting the large thing thing there is to resol he met to long furting about to forthete.

The little forge est nate to long for his most the large to his most the large to his seed that yes thought the thought the way seed that yes change that it would make it all unight for them sout seed to them. Forlean a young by gets was a strong The mater oned is faither, he searl that as he was goin shud be sgot a licking for it.

Evinthing in the Clay they Moule soll hingthe ting one clay Myning they have any mente Bonghier a Big Bong the Bong Change conate. Because the little Bonys, because it Man Brigger then he are Anchalta Bony the big Bonys coat. Convins the Ceron prince had may Masters, Who enclosed to teach him

Boyterme and syrace is to big for you are auxyoing by they externy to look hundery though what was good who in as you'd boyed gived rejuds founds be ducated with meny sound loogs of this of the yeard rejuded he would nade ling and day his father with him troubet he chad bernes he sund he head seemes he sund The but boysone grad and one small the swall pay had occur to they for him lake the little boys court then sand he are shall be fitted as my cool es toind the big boy had my the sonol for her the big bay fundered to Coyas The persean prince had meny Misso works entered to teach me gudy & said that the little hay should keep his wat

20 the little Boy had a Big Joshet and the Big their mires to swort and was to havetholder Boy to ynolge which fit the best and at last the byour he waysed to harm something so was a little By sond the other was a Biy one Boy Fred a little Jecket no they made up I will the you about a boy norme he get two little Boys to beam him one less purished to dowing so

Grammar Grade (Poor)

boys And was whiped by his falles for not doing wright Thines He wanted to eway coals with a mother boy but he did not want to swat with him so he took the coal-Byrus Cerian prince was educadied by son small The boys that he played with him node him there If from him and post it on his back

Odgs 17y 6m

"O'die" said he, my master punished me to-day for not deiding justly." "Thy how was that," asked the father. Eyens answered him had a very good pleasant disposition, but when playing with his young companions he ready allucys would to command, and the Loys generally made him their king. One day his father lasked him what he had learned thus, there were two longs met one of them was Prince bynus had been nicely educated and Prince Cyma.

I happened along and they made me judge bad & said for the small bay to heef the that was as much bor large as the other was small coat while the other one had a cout on To small, the large boy wanted to change coats but the other said, My so the large by tried, to late the cost by force, just then small cout, but my master lots me that it was not right for the larger bay to have taken the cout from the smaller.

byme, a Cerein frince had many maiteenho endeaved to teach him all that was good, and he had been educated with a number of long flue over age. He was of a good die hooten and of a himan temper, Core day his father asked him "What he had leaved that day, In said byne of nas function for deading unjutty" Now it happened that thus new two boys one a great boy, and the the solution by and it little by had a coat that was much to his for him, and Astory of Person Prince.

the quat boy had a coat that was much to tight for him.

by. Eyes was prinished for giving his consent by his master, by your overest by his master, and fraction for prinished you deciding unjustly, which prinishment deciding deserved. so they quanelled, about it who should have the Large wat and who should have the small cost, the little has not willing to give who his coat to the great by. Is your happened tole passing at the time of the grand mas asked to, be the produce and he gare his consent against that of his master, that the great by The small sout so the great boy faced the oral from the little should have its big wat and that the little boy should have

Cyrus, the Dessian Dunce.

Egrus the pusion punce was a very good natured and the boy's always chose him for their king.

One day his father asked him what he beamed at school and he said he had been punished, hie father asked him what he for he said that their was a quat bay who had a coat to small for him and a dittle bay that had a coat to large for him and the great by wonted to exchange but the little bay

one to decide, and I decided that the great by should have the hig coat because it fitted him best, and the small coat because that fitted him best, but the teacher said I had did not wish to, and so the great by took it away by force, but just then I came by und they asked no right to judge so because the lig coat belonged to the little log, and the little osat to the hig boy and so the teacher punished me.

and secenced his early education — with many many other boys. They would Somme fressean Cyrus, was, then every thing was good, and whener they would do every he would do his best to stop it one day he got whiled for interfering between two boys they called on him as Judge decide thou

Jacked the large boy persuached the Jacket but he would not and he left matter one day there boys met one very brad and one large boy had mall for had mall factor that any to byour to decrebe and Tyrus decided Wongly and Therefore got whyed byens had a quest many matters to teach him who was right. his father, askld him What he head done that day hereind he had It was a bay of very good dreposition. When became howelest night Alsaid that Then West too love onlyseat by undaily small one. been Ourished for Judying unjustly. Why he asked his futher

Small fory hade very standige coot and the largety on posed the they The large by had areny small coat quite west at the elbore and the to be probed and sacroled that the langelly should have the langecost lebangled but the little bez did not wanter and so thywanted me and that 4 as a hat be formished me for.

INDEX.

Arithmetic		127,	130,	131,	163,	178,	190,	201,	220
Abbreviated processes in		•					164,	167,	1 9 0
							164,	178,	190
Elementary combinations in									167
Ends to be secured in teaching							•		163
Expression of arithmetical processes								166,	168
Fac-similes of pupils' work					11			201,	220
Figures to have special attention .									145
Fundamental operations in				٠.				164,	1 66
Measurement, problem in									168
Methods in use in teaching								165,	166
Moral bearing of, in teaching									16 9
Practical work in								166-	
Results in, how marked								128,	133
Tests in, for primary schools									127
for grammar schools									130
Beginners in reading, table showing methods	of t	teacl	hing					173,	174
Classes, number of examined Composition writing							•		124
Composition writing					126,	129,	156,	178,	190
Average percentages in primary schools	s.								178
in grammar school									190
Capitals and punctuation					127,	129,	130,	158,	159
Capitals and punctuation Contrast in schools in composition .									157
Forms of expression and words used in							159,		
Grades of, to suit activities of mind.									156
~								162,	163
Letter-writing, a practical form of com-									159
Letters written in primary schools, fac-	sim	iles	of .						202
Substituted for narratives in some s	scho	ols							189
Writing of, omitted in some schools.									132
Narratives written in grammar schools									226
Punctuation				126,	127,	129,	156,	178,	190
Results, how marked							127,	, 129,	130
								157,	
Syllabication									126
									129
Examinations, fair test of attainments .								131,	133
Age of pupils examined						. ,		121,	124
Age of pupils examined Ages omitted on some papers									125
Average ages of pupils								178,	190
Classes, pupils, and schools, number of									124
Extent of									123
How, by whom, and when conducted									131
-									

250 INDEX.

Subjects embraced in examinations					. :	125
Tabulated results of					178,	190
Tabulated results of						201
Fac-similes of pupils' work						170
How selected and arranged						1 90
How selected and arranged Grammar schools, tabulated results of Number of schools, pupils, and classes examined Number of pupils tabulated						124
Number of pupils tabulated						124
Lithographs. (See "Fac-similes.")						
Marking and tabulation of results						133
Mixed schools number of		Ĭ.				124
Mixed schools, number of		Ĭ.				172
Morel culture its relation to knowledge	•	•				
Norfolk county School Committees' Association		•			169, 121,	172
Observations in schools, in reading		į				124
Observations in schools, in reading in penmanship in spelling in composition	•	•	· ·		•	144
in spelling	•	•			•	147
in composition	•	•			• •	156
in composition	• •	•	•			100
in arithmetic	. 127,	100	144	170	100	109
in arithmetic Penmanship Average percentage in Differences in schools Drawing, an aid to Fac-similes of pupils' work in	. 121,	129,	144,	110,	150,	100
Average percentage in		•	•		178,	
Differences in schools		•		144,		
Drawing, an aid to		•	•			147
Fac-similes of pupils' work in		•				202
Figures and letters, accurate forms of	•	•	•		144,	
Methods of teaching, to secure good results .	•				146,	
Requisites, legibility, uniformity, rapidity .		•		•		144
Drawing, an aid to Fac-similes of pupils' work in Figures and letters, accurate forms of Methods of teaching, to secure good results Requisites, legibility, uniformity, rapidity Rapidity too much neglected Tests and marking Percentages Tables of, for primary schools for grammar schools for grammar schools For county Primary schools, tabulated results of Number of schools, pupils, and classes examined		•		•	144,	
Tests and marking				127,		
Percentages				•		164
Tables of, for primary schools				•	•	178
for grammar schools		٠.,			•	
for county					187,	197
Primary schools, tabulated results of					•	178
						124
Pupils, number of, tabulated			,			124
Dunctuation	. 126,	127,	129,	156,	178,	190
Reading	. 125,	128,	134,	174,	178,	190
A verage nercentages in					178,	190
Books used, too advanced for pupils Definition of reading Ends of teaching						137
Definition of reading						124
Ends of teaching						135
Expression important end in oral reading .						136
Girls better readers than boys						139
Girls better readers than boys Knowledge to be made an end						139
Love for, how acquired						138
Oral occasion for silent reading						133
Oral is made the end						136
Pooding books for study						139
Populty in achools differ	•		•	•	•	135
Cilent reading shown by perretives	•	,	•	•	140,	
Oral, is made the end	•				138-	
Supplementary reading Table showing methods of teaching.	•		•	•	100	174
	•		•	•	•	137
Teaching, methods of	•		•			123
rests in reading for primary schools	•			•	•	
Teaching, methods of	•	٠.	•	•	•	128
Schools, number of, examined	•	•	•	•	•	124
Comparative rank of	•	•	•			171

Spelling						. 126	, 129,	147,	178,	190
Arrangement of results by town								•	•	14 9
Average percentages in primary	z sch	ools						•	•	178
in gramm:	ar sc	hools	3							190
Common words to be spelt.									•	148
Errors from mispronunciation						•				153
Oral, useful						•	•	•		155
too much relied upon								•		148
compared with written	•					•		•		155
Phonic analysis							•		154,	156
Rules to be applied in grammar	sch	ools						•	148,	153
Spelling in sentence and by dic	tatio	n cor	mpar	ed					147,	148
Tests and marking in primary s	selio	ols							126,	133
in grammar	scho	ools					•	•	129,	133
Word method of teaching read	ing a	n aid	1					•	155,	1 56
Words selected from sentences					•		. 148,	150,	151,	152
Supervision of schools										171
Table showing method and cost	t of							•		174
Tests and marking for primary school	ls						•	125,	126,	127
for grammar scho	ols							128,	129,	130
Tests, how applied				•				•		131
Table showing cost of supervision					•			•		174
method of teaching be	ginr	iers t	o rea	ıd						174
expenditures for three	yea	rs		•	•			•	•	176
wages of teachers and	pup	ils to	teac	her		•				176
percentage of primary	sch	ools				•		•		178
of gramma	r scl	iools		•					•	190
rank of towns in differ	ent	stud	ies							198
Towns, why designated by letters										170
Index to, prepared				•						170
Words misspelt, lists of					•			151,		
Writing, what included in	•	•	•	•	•	•	•	•	•	144

LIBRARY OF CONGRESS

0 029 456 657 0



